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STRATEGIC SURVEY OF SOUTH INDIA AND ORISSA

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Section III

POPULATION AND SOCIAL CONDITIONS

15. General.

a. Geographic.

The area covered by this survey consists of Orissa, Madras, Coorg, Mysore, Travancore, and Cochin. It includes, therefore, in Orissa the most southeasterly part of India where Aryan (Indo-European) is spoken, and, in Madras, Mysore, and Travancore the greater part of Dravidian India, that is, the part where Dravidian languages are current. In this area is all the eastern seacoast below Calcutta and the southern section of the western coast, containing in the east the seaports of Vizagapatam and Madras, and in the west the port of Cochin, none of which is first-class. It has fertile rice fields on the plains and hill regions, where tea and coffee plantations abound. Great rivers cut across it--the Mahanadi, Godavari, Kistna, Kaveri--all flowing from west to east, and providing abundant potential water power, though little of it has been developed and industry is slight. In Orissa, the back country is wild, hilly, and unproductive. Just about a century ago human sacrifice as an agricultural fertility rite was still practiced there and a military expedition was sent in to abolish it. Not far back from the coast in the Madras province are the Easterr Ghats, low hills constituting the eastern edge of the Deccan plateau. In the south are the Nilgiri ("Blue Mountains") group, among which is located Ootacamund, the summer capital of the Madras Province. Here also is the home of the Todas, celebrated in every textbook of anthropology, majestic-looking and noble savages, whom Rousseau would have admired. Along the coast are innumerable points for hostile landings by any power that has air and naval control of the Bay of Bengal. A very

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practicable base for invasion might be Ceylon. From there a hostile force could strike by air and sea at any number of nearby points.

In the case of an invasion the great masses of the civilian population are not likely to offer any hindrance, though neither are they likely to give any assistance. Their major concern is not with war, but with the daily problem of finding sufficient food to maintain mere existence. In the one large city of the area, Madras, bombing might produce panic, with the people scattering throughout the hinterland. To a lesser degree, other cities, like Madura and Bangalore, might also be demoralized.

b. Ethnographic.

South India today, with its great temples and strict Hinduism, is the region of Dravidian culture, as contrasted with Aryan culture, which flourishes in the rest of the country. The Dravidian and Aryan cultures are distinguished from each other, first, in the matter of language. The Aryan languages belong to the Indo-European family, as do English and most of the other languages of modern Europe, and Sanskrit, Hindustani, Bengali, Gujarati, Marathi, Oriya, and some others of India. The Aryan-speaking peoples came into India from the northwest in the second millenium B.C. The Dravidian family of languages however, is confined to India, though many scholars think it, too, entered the country from the northwest, but at some time earlier than the Aryan. The chief Dravidian languages are Tamil, Telugu, Kanarese, Malayalam.

Other cultural differences between Aryan and Dravidian India exist today besides the linguistic; for example, caste organization is in some respects dissimilar (paragraph 17); architecture in Dravidian India now has characteristic forms unlike those of architecture in the Aryan regions; special forms of deities are widely worshipped in one

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area which are hardly known in the other. And, finally, Dravidian India has a greater degree of cultural homogeneity than exists among the various areas that constitute Aryan India.

The meeting of Aryan with Dravidian is the oldest cultural conflict in India, and it still continues. When the Aryans entered the country by the northwest passes, they clashed with their predecessors, the Dravidians and Mundas (see in Survey of India, paragraph 18), and slowly made headway against them, gradually becoming the ruling group. They had their own social organization before they arrived, which was in three divisions, separated by occupational differences. These were Kshatriyas (rulers and warriors), Brahmanas (priests and intellectuals), and the Vish or Vaishyas (commoners). As they conquered the non-Aryans, they converted them, as far as practicable, into serfs (Shudras). The distinction between Aryan and non-Aryan was sharply maintained, and was symbolized by the fact that Aryan boys underwent an initiation ceremony, called a second birth, and were invested then with a sacred cord worn over the shoulder. Hence all Aryans were "twice born," but the Shudras had no such rebirth and were only "once born."

Out of this distinction between Aryan and Shudra, twice-born and once-born, coupled with the occupational differentiation of the Aryans themselves, grew in later times the caste system. This system was consciously assimilated to the old Vedic system of social classes. The Vedic classes of Brahmanas, Kshatriyas, and Vaishyas were considered to include the upper castes; the Shudras to include the lower castes. These were in theory the four recognized major groups of society, each with many sub-divisions. In time those persons whose occupation involved the most repulsive duties and those who had violated the most fundamental ethical obligation by breaking their caste rules and hence were "out-casted," were relegated to a position inferior even to that of the

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Shudras, and became the "Fifths," or Untouchables. Rules were set up by the Brahmans to insure purity of the Aryan stock, which suggest to us their consciousness of the ethnic clash and their fear that their own group integrity would be destroyed. Intermarriage was forbidden; the penalty for a misalliance was social degradation. Nevertheless ethnic blending was unavoidable, and today it is an accomplished fact. There is no differentiation of physical type--all people are of the usual short, small-boned dark type--and little of general culture; only caste discrimination now echoes the ancient social distinction.

Another aspect of the Aryan and non-Aryan conflict was the linguistic. The Aryans, though fewer in number, did not surrender their language. Being generally the rulers, they held to it as the British, too, have done in India, and endeavored to make the masses of the conquered use it. In each case the conquerors have had a measure of success, but the success has been achieved at the price of linguistic change. We see those results in respect to English in the "babu" dialect of the language spoken today by Indians, and the near-approach to it called "Chee-chee" spoken by Anglo-Indians or Europeans raised in the land. Similarly, in ancient times the Vedic Sanskrit of the invading Aryans was also modified. Its phonetic system was altered to conform in part to that of pre-Aryan tongues; its noun and verb inflection was reduced and altered; new syntactical constructions displaced the old; the vocabulary dropped some of its Aryan words to substitute borrowed words from non-Aryan languages. The modern dialects of Aryan India are Aryan at base, but vastly altered by reason of contact with their non-Aryan predecessors. Occidentals can see a parallel in the transformation of Latin to Italian, Spanish, Portuguese, French, Roumanian.

As the Aryans advanced in India and their language dominated the blended Aryan and non-Aryan folk, the frontiers of Dravidian speech were steadily pushed to the south. The linguistic border is still slowly moving down the peninsula, and one of the frontiers is the borderline in the east between Orissa and Madras, where Oriya (an Aryan language) is gradually displacing Tamil (a Dravidian tongue), while another is on the west coast, where Konkani, another Aryan speech, is invading Dravidian territory. A few islands of Dravidian speech exist today in the Aryan region, of which the most dramatically placed is that of the Brahuis in Sind and Baluchistan. These are a "primitive" people living only a short distance west of Mohenjo-daro in Sind, an Indus civilization site of the third millenium B.C., which they have helped to excavate, a site that may possibly have belonged to their ancestors nearly five thousand years ago.

In other aspects of culture than language Aryan and non-Aryan have also clashed and blended. The most contributory of the non-Aryans to present Indian civilization were presumably the Dravidians. It is a guess, not implausible, that they owned the cultures of the Indus valley around 3000-2000 B.C., in the region where the Brahuis now live, but there is no certainty that they did, and hardly can be any until we learn to read the writing left by the Indus valley people. Tradition among the Dravidians themselves mentions knowledge of writing, literature and the study of grammar independent of the Aryan tradition, but it is impossible to establish those claims. Though we can affirm that characteristic Aryan civilization in India, from around the sixth century B.C. on, is a fusion of Aryan and non-Aryan, we can only surmise how much of the non-Aryan came from the Dravidians. The literature of ancient India unfortunately does not give the answer. It was the Aryans who wrote the first books in India, and their oldest texts are at least a

thousand years older than any existing in Dravidian languages. The Aryans first accepted the system of writing in India which can now be read, and, with a prepossession that may have been only a kind of provincialism, they used it to ascribe to themselves creative superiority in civilization, and to the non-Aryans a corresponding degree of intellectual, social, and moral degradation.

Southern India has been Dravidian since the time of our first historical records. There a civilization was in existence in the fourth and third centuries B.C., as mentioned by Greek authors of that time. By implication it existed before then. The Aryans claim that this civilization was taught by their Vedic sage Agastya, who carried the holy word and the sacred fire to the south. In the Sanskrit epic Ramayana the Aryans show their hero Rama leading to culture and light and victory over the intransigent demons of Ceylon the southern aborigines, who are figured as monkeys. The social stigma of the "monkeys'" sub-human state is not quite palliated by an obviously later rationalisation in the story that they are incarnations of lesser deities. The religious community known as Jains also bear testimony to the early age of South Indian civilization; they say that in the fourth century B.C., when a twelve-year famine devastated northeastern India, their pontiff Bhadrabahu carried their lore to southern India. He established the church at Sravana Belgola in what is now Mysore state, and this town is still the chief center of the Digambara ("Sky-clothed") division of that faith.

These legends hardly establish that the Aryans civilized the Dravidians; they only prove that the Aryans thought the Dravidians below respect until they began to adopt the culture that the Aryans had created, or at least believed that they had created. For there

is always the possibility that the Dravidians contributed ideas and institutions to the historical "Aryanized" culture, especially if it should turn out to be true that it was the Dravidians who developed the Indus civilization.

The chief Dravidian peoples today are four: the Tamils, occupying most of the eastern coast of the lower part of India and the country inland from that coast, as well as the northern part of Ceylon; the Telugus, north of the Tamils along the eastern coast and inland in Madras and Hyderabad; the Kanarese, who are west of the Tamils; and the Malayalam-speaking people, who are also west of the Tamils and south and west of the Kanarese. (See linguistic map which is being prepared to accompany the Survey of India.) All four of these peoples have cultivated extensively literature, architecture, sculpture, religion, drama--indeed, all the arts of civilization--and have splendid monuments from antiquity. But the most extensive and the oldest seems to be the Tamil.

c. Historical.

(1) Pre-Muslim. The south and eastern coastal sections of India are mentioned in fairly early Sanskrit literature, but accounts or references that may be called historical begin at about the end of the fourth century B.C. At that time, following the invasion of Alexander (326-25 B.C.), the Greek Megasthenes was living at the court of King Chandragupta at Pataliputra (modern Patna) in Bihar. This king had an extensive empire, and was evidently in touch with the regions adjacent to it. One of these was the extreme south of India. There the best known city was Madura, and Megasthenes knew of it and the land of Pandaia (Sanskrit Pandya), where it was located. King Chandragupta's grandson, the great ruler Asoka, sent an embassy to that region in the third century B.C., for it was an important

commercial center. A little later it was in contact with the western world, or at least the products of the one came to be exchanged, through intermediaries, for the gold of the other. Cotton, rice, pepper, and some other articles bear names in Greek and Latin which are derived from Indian, specifically Dravidian, sources, and recall the country where those products originated. So, too, the Hebrew words for the peacocks and apes which Solomon imported (I Kings 10:22) are names of Dravidian origin. These objects must, therefore, have come to the west from India. Roman coins, on the other hand, from the time of the Caesars have been found in hordes around Madura, and they in their turn point to the absorption of gold even at that early date, for which India has been known throughout history.

Orissa, along the eastern coast, first comes into historical records at the time of the emperor Asoka. He had fought a cruel and bloody war of imperialism there--apparently his only expansionist war--and the suffering it caused threw him into the deepest depression. He records the war and his sorrow in his inscriptions and memorializes his conversion to pity and the law of piety.

Until the time of the Muslim intrusions into southeastern and southern India, at about the end of the thirteenth century, a number of Hindu dynasties of greater or less importance had held the different parts of the country. Records of their military deeds and peacetime acts include many wars, showing that the country was politically disunited and weak; but numerous building projects, literary and religious movements, and vast accumulations of wealth indicate a high cultural and agrarian development.

(2) Muslim. The Muhammadans, under the kingdom of Delhi, began to penetrate the Deccan plateau in 1294, north and west of the area covered in this survey, but did not establish themselves until

1308. In 1310 a Muslim force went to the far south, capturing Madura and the kingdoms of which it was the center. From that time on the history of South India is one of wars between Hindus and Muslims, the latter on the whole having the advantage and at one time or other holding every part of the country. The Muslim control, however, was chiefly military, rather than ethnic, as it often was in northern India, and there was no wholesale conversion of conquered Hindus to Islam. South India, therefore, is the most Hindu portion of India; caste is strongest there; temple organizations are greatest; the tradition of the dance and some other cultural features the purest.

Orissa, also, was never assimilated to Islam, though various Muslim generals and kings invaded it. The difficult country along its borders gave it a fair degree of defense. Its coastal region is today a stronghold of Hinduism, famous for its temples at Bhubaneshwar, Puri, Cuttack, and other cities, and noted for its annual festival of Jagannath ("Juggernat") in Puri.

(3) European Settlements. When the Europeans arrived in India by sea they landed in the south. The first to come were the Portuguese, led by Vasco da Gama, who, after rounding the Cape of Good Hope and sailing up eastern Africa, struck across the Indian Ocean and on May 20, 1498, reached Calicut on the western coast of the present province of Madras. Other Portuguese followed him and in a comparatively short time succeeded, under Alfonso Albuquerque, in capturing the city of Goa (1510), about 270 miles north of Calicut. With the surrounding territory it is still a Portuguese possession embedded in the lower part of the Bombay province.

The Portuguese initiated European policy in India. They traded with Europe from India and used India as a center to control sea-borne trade eastward to the Spice Islands and westward to the

Persian Gulf and the Red Sea. So profitable was their commerce that "Golden Goa" could rival the splendor of the neighboring Indian kingdoms. The Portuguese expanded their holdings in India by gaining and at one time holding a number of ports, but today they own only Goa, Daman (about 100 miles north of Bombay), and the island of Diu (on the southern coast of Kathiawar), having a total of about 1,470 square miles.

Besides having trade interests, the Portuguese undertook conversion of Indians to Christianity, starting at the time of the conquest of Goa, using force as freely as preaching. In 1542 the Jesuit Francisco Xavier went to India, where he labored as a missionary, largely in South India and Ceylon, but also in Malacca and other eastern islands until his death near Kwang-tung, China, in 1552. His body was brought back to Goa, and his tomb is one of the city's monuments. He established the Roman Catholic church there, and in Travancore, Madura, Madras, and elsewhere. He instituted harsh measures against the Syrian Christians and Jews of Cochin and Travancore who had been there many centuries before the Portuguese arrival. In 1560, 8 years after his death, the Inquisition was established at Goa. The Christian missions in India inaugurated by Xavier have expanded steadily, and the greatest concentrations of Christians today are in the areas where he preached.

The Portuguese also adopted a deliberate and extensive policy of mixed European-Indian marriages, to provide a non-Indian group of people who would be content to live in India. In this way there came into existence the "Anglo-Indian" (formerly called "Eurasian") community, which now constitutes one of the political and cultural groups of the country. Immigrants to India from all the European countries have shared in the parentage of the present group, but the Portuguese

names are the most numerous except for those from the British Isles, and rival them, even in northern India.

The Dutch, who were the next European nation to follow the Portuguese to India, never established themselves firmly--their interest was mainly in the islands to the east--but their main points were Pulicat, north of Madras, which they fortified in 1609, Cochin, and Negapatam, which last was their principal station from 1660. They were finally eliminated from India by the British under Clive at the battle of Biderra (in Bengal) in 1759.

The Danes established a small post at Tranquebar, south of Madras, in 1620, and much later another at Serampore (1676) north of Calcutta, both of which were sold to the British in 1845. Neither was ever of great importance.

The British began their trading operations under the East India Company (founded December 31, 1600) by "separate voyages" to the Spice Islands, touching at Surat, above Bombay, in 1608, and in 1612 getting the right to trade at Surat, Cambay, and a few other ports in Gujarat. Their first proprietary holding on Indian soil was at Fort St. George (modern Madras) in 1639. Here a trading post or "factory" was established. This was the beginning of the Presidency of Madras, and long was the center of administration of British interests in India. Other factories or posts in Indian towns followed, notably at Bombay (1661) and Calcutta (1690), and from these and Madras the British extended their interests and holdings.

The French were the last of the European powers to enter India. They operated through "La Compagnie des Indes" (founded in 1664), and first settled at Pondicherry in 1674 on the eastern coast below Madras. This was the headquarters of their Indian possessions and still is, but their present holdings include only Pondicherry

and Karikal below Madras, Yanaon above Madras, Mahe, on the west coast just above Calicut, and Chandernagore, a short distance north of Calcutta. The area of these is 203 square miles with a population of about 300,000.

(4) British and French Conflict. During the eighteenth century, after the death of Aurangzib (1707), the last great Mughul emperor, the Mughul empire broke up under blows from the Marathas in western India and revolts elsewhere. The British and French commercial interests were seriously affected by the political disturbances, and the two European nations were therefore increasingly involved in politics. As Indian rulers warred with one another, the British and the French engaged in the same wars on the sides of their respective Indian allies or associates. And as the two nations fought in Europe, their representatives also fought in India and endeavored to draw Indian princes into the conflict. It would not be worth while to describe here the several wars in India between the British and the French, with their respective allies, and the intrigues in which the two were involved. It is enough to say that South India and the Deccan were the scene of the greater part of that conflict. Yet the most decisive single battle for British supremacy was that at Plassey in Bengal (1757). The French were hardly involved there, yet by it they lost their relative equality with the British, who won for themselves there a position far greater than that which the French had ever achieved.

The French had many competent servants in India, yet could not establish themselves permanently. One of their governors, Dupleix, was as capable an officer as ever served a European government there, though crippled by lack of adequate support from his home government. The British were always able to maintain superiority over the French

at sea, and they were represented on shore by aggressive agents, who pushed business interests with the maximum zeal. French power in India virtually came to an end in 1761, by the loss of Pondicherry (afterwards restored to them). The French danger to the British was renewed in 1782-83, when the brilliant Admiral Suffren and the Marquis de Bussy defeated the British, but the peace concluded in Europe negated the results of the victory. The final French threat was eliminated in 1803 when Lord Wellesley refused to return to the French their former possessions which the Treaty of Amiens (1802) had restored to them. With the renewal of the European war (1803), Lord Wellesley's action was justified.

(5) French and Portuguese Contributions to Modern India. French elements in Indian culture today are hardly discernible, being far fewer than the Portuguese, though the latter never sent armies over the wide range of territory which the French forces traversed. Roman Catholicism in India is Portuguese; Portuguese proper names are found among Anglo-Indians everywhere; the Portuguese language can be heard not only in Goa, but also in Bombay among families that retain a Goanese connection, while a large amount of folklore from Bombay is as much Portuguese in character as it is Indian. Portuguese loan-words appear in many Indian languages, even for common objects (such as Hindustani kamra, "room", which comes by way of Portuguese from Latin camera).

(6) Rise of British Power. While the British were defeating the French in South India, they were by the same fact fixing their own hold on that area. In the eighteenth century they acquired large parts of the present province (formerly called "Presidency") of Madras. The Madura region was taken over in 1762 by British officers, nominally in behalf of the Indian state then owning it, and in 1801 the state

ceded all authority. Mysore, which had been ruled by the Wadiyar family, was acquired by a usurper named Haidar (or Hyder) Ali, who became master of the state in 1761. His fortunes varied, but at his death in 1782 his son Tippu Sultan succeeded him, and kept a hold on Mysore until he was killed at the storming of his capital Seringapatam on May 4, 1799. The British restored the Wadiyar family, but annexed certain parts of the state, including the western coast, while part of the rest was assigned to the Nizam of Hyderabad. In 1831, when the state was badly administered, Lord Bentinck assumed direct administration for the East India Company and the state was administered by the Company and then by the government of India until 1881 when it was restored to the Wadiyar family. Orissa was taken in 1803 from the Marathas.

During the period of British rule--that is, since the Sepoy Mutiny (1857-58)--Orissa and Southern India have been the least disturbed parts of India. The Mutiny itself did not affect the south, and in this century the great nationalist movement has been less aggressive there than in Bengal, the Punjab, and Gujarat. Its modern political issues have been local, such as the agitation of the Kanarese-speaking people to constitute a single political unit, or the struggle of the non-Brahmans to establish their human rights against the Brahmans.

Christian missions today are most successful in South India. The rigid caste restrictions, which are more intolerable than in North India, predispose the Untouchables toward Christianity, which both denies caste and often helps converts to a better economic situation by giving financial loans or other kinds of aid. Whole villages or communities of Untouchables will accept Christianity, largely led by

such considerations, and missionaries accept them, not expecting the immediate converts to understand the new religion, but hoping to teach the future generations.

One of the most impressive developments in South India under British rule has been its change from self-sufficiency in food to dependence upon importation of rice from Burma. The desire and need for a cash crop to meet taxes, pay loans to moneylenders, and purchase manufactures were responsible. British machine-made goods undersold the village handicrafts, and the villagers needed ready money to purchase them. They were inclined to turn from subsistence to cash crops, and they could do so because Burmese rice was brought in by ships operating under the Indian government's encouragement and protection. With this change in economy a greater population could be supported and the people therefore multiplied; but the locally grown food supply was not multiplied at the same time. Now that the Japanese have cut off imports from Burma, South India faces a serious food shortage.

The British occupation has brought South India peace and increased population, but only a minimum of machine industry, and has lessened the region's self-sufficiency. It lies open before a sea invader, and its former military tradition has evaporated, so that its weakness is an invitation to the aggressor.

16. Population.

The total population of the area is 76,586,000, more than that of Japan, a little less than that of Germany in 1939. The following table is based on the census returns of 1941.

Region	Persons (in thousands)	Area (sq. miles)	Density	% of increase over '31	Rate (%) of literacy
Governor's Provinces					
Madras	49,342	142,277	347	11.6	13.0
Orissa	8,729	32,681	267	8.2	10.9
Indian States					
Mysore	7,329	29,326	250	11.8	12.2
Travancore	6,070	7,625	796	19.1	47.7
Orissa States	3,025	18,261	166	12.7	8.9
Cochin	1,423	1,480	961	18.1	35.4
Madras States	499	1,593	313	10.0	13.2
Commissioner's Province					
Coorg	169	1,593	106	3.3	20.5
Totals	76,586	234,836	400.7 (Average)		15.7 (Weighted average)

The most densely populated regions are the states of Cochin and Travancore situated along the lush plain of the Malabar Coast. Cochin has a higher density than any comparable part of India. Certain of its districts are among the most thickly populated rural regions in the world. The 1931-1941 rate of increase for both Travancore and Cochin was well above the average rate for India. The population of the Malabar plain, already very dense, has been increasing rapidly. Homesteads are scattered along the countryside; there are relatively few clusters of houses.

In other parts of South India and the East Coast, the bulk of the population lives in villages. The province of Madras includes most of the fertile lowland of the East Coast and extreme south, and contains a number of fair sized towns. Mysore, in the more arid plateau region of the Deccan, has a lower density and relatively fewer towns. Orissa is largely hill and jungle country and is very sparsely settled save for the strip along the sea.

Literacy is higher in Travancore and Cochin than in any other part of India. The literacy rate for Madras is about the same as the average for the country while Orissa falls below the national average.

South India has been the source of labor supply for many areas. Tamil and Oriya workers have migrated to Burma, South Africa, Trinidad, Fiji, Assam--wherever a cheap supply of plantation labor was needed within the British Empire. The area still is a great reservoir of unskilled labor.

Men of Military Age - 1931

	20-25	25-30	30-35	35-40	1941 % of population increase over '31
Madras	1,997,358	1,880,280	1,767,891	1,535,940	11.6
Orissa	852,231		702,548		8.2
Mysore	295,141	272,035	262,459	228,090	11.8
Travancore	221,670	193,529	181,818	150,647	19.1
Cochin	49,736	42,145	40,050	34,736	18.1
Madras States	17,695	18,942	16,890	15,859	10.0
Coorg	9,879	9,740	9,175	7,164	3.3

Total number of military age (1931) - 10,813,648

Cities and Towns of More Than 50,000 - 1931

	City	District	Population, 1931
1.	Madras	Madras	647,230 (*777,000)
2.	Madura	Madura	182,018
3.	Bangalore City	Bangalore	172,357
4.	Trichinopoly	Trichinopoly	142,843
5.	Bangalore Civil and Military Station	Mysore	134,113
6.	Mysore City	Mysore	107,142
7.	Salem	Salem	102,179
8.	Calicut	Malabar	99,273
9.	Trivandrum	Travancore	96,016
10.	Coimbatore	Coimbatore	95,198
11.	Kolar Gold Fields	Kolar	85,103
12.	Ernakulam-Mattancheri	Cochin	76,283
13.	Tanjore	Tanjore	66,889
14.	Mangalore	South Kanara	66,756
15.	Cocanada	Godavari	65,952
16.	Cuttack	Orissa	65,263 (*74,291)
17.	Conjeeveram	Chingleput	65,258
18.	Guntur	Guntur	65,179
19.	Rajahmundry	Godavari	63,526
20.	Khumbakonam	Tanjore	62,317
21.	Bezwada	Kistna	60,427
22.	Tuticorin	Tinnevelly	60,395
23.	Cuddalore	South Arcot	59,057
24.	Ellore	West Godavari	57,342
25.	Vizagapatam	Vizagapatam	57,303

*Provisional figures for 1941.

Cities and Towns of More Than 50,000 - 1931 (cont.)

26.	Vellore	North Arcot	57,265
27.	Tinnevelly	Tinnevelly	57,078
28.	Bandar	Kistna	56,928
29.	Palamcottah	Tinnevelly	51,990

17. Ethnic and Social Groups.

In physical type, the South Indian is somewhat darker and smaller than his compatriot to the north. The diet of the poorer classes in Madras is as deficient as any in India and consequently many of them look scrawny and weak. Those who do get enough food are not lacking in stamina and strength, while the upper classes have more than their share of fat men. Sturdy, well built men are often found among the more prosperous farmers, fishermen, and similar working classes, especially in Malabar. Although the Dravidian-speaking people of the south are supposed to be descended from the original population of India, they are of the same racial stock as the Indians of the north and northwest.

There is not, in South India, the same Hindu-Muslim problem that is found elsewhere in the country. Muslims are few, and constitute only a small fraction of the total population of this region. Hence there is comparatively little friction between the two groups.

South India is the stronghold of caste. Caste restrictions are stronger there and caste divisions deeper than almost anywhere else. In Orissa too, caste observance is strict. The supposed fourfold division of castes into Brahmans, Kshatriyas, Vaishyas, and Shudras does not actually hold true anywhere in India. But in the south there is even less validity to this classification. The Brahmans hold sway over the social system as in other parts of India, but below them is the great number of castes which are equivalent to Shudras. Those castes which claim to be Kshatriyas and Vaishyas are almost always groups which have recently risen from the Shudra ranks by claiming higher status and being able to maintain their claim. Since the social structure differs from place to place, the following list of major castes and social groups is arranged according to the regions

of South India and the East Coast.

Malabar

The Malabar area, comprising the states of Travancore and Cochin and the Kanara and Malabar districts of the province of Madras, has many unique features of social organization. This region was cut off from the rest of India by the wall of the Western Ghats and was rarely overrun by conquering armies. As a result, there developed institutions and customs which do not appear elsewhere in the country. Some castes, as the Nayars, have matrilineal descent, which means that a man gets his name from his mother's family and inherits property, not from his father, but from his mother or her brother. Some people of this area practice polyandry, the custom whereby a woman may be married to several husbands at the same time.

Malabar caste rules used to be so stringent that a high caste person was polluted if an individual of low caste approached within a specified distance. The observance of distance pollution is now rare. In former years a Kammalan or an Illavan would pollute higher castes if he came within 24 feet of them. A Palayan would contaminate a caste Hindu at 64 feet while a Nayadi had to keep a distance of 72 feet.

The following are the major castes and groups:

Nambudiri Brahmans. These are the original Brahmans of Malabar, whose native language is Malayalam. There are other Brahmans in the region, mostly immigrants from Tamil and Telugu areas, but the Nambudiris will not eat or intermarry with them. Nambudiri customs are different from those of other Brahman subcastes. For example, only the eldest son of a family marries in his own caste while the younger sons form semi-official unions with women of lower castes such as the

Nayars. Their children by these alliances belong to the mother's caste, and cannot eat with their father, being of lower rank than he. Throughout India a man will not lose caste by having sexual relations with a woman somewhat below him in the caste scale, so long as he does not eat with her.

Nayar. These were formerly the warriors of the region, and are still imbued with a fighting spirit. Most Nayars are now small farmers or agricultural laborers. A few are landowners and a number of Nayars hold governmental positions. Domestic servants in well-to-do Hindu families in Malabar are almost entirely recruited from this class. Some typical Nayar family names are Menon, Achan, and Panikkar.

Kammalan. The artisan class is divided into a number of subgroups, which are traditionally carpenters, masons, blacksmiths, goldsmiths, and one lower group consisting of leather workers. The men of yet another subdivision are barbers but also act as priests and officiate at marriage and funeral ceremonies.

Illava (Illuvan, Ezhava, Tiyan). Their traditional occupation is the cultivation of the coconut palm. They are toddy drawers who shinny up coconut trees to tap the sap which makes a mildly alcoholic beverage, toddy. Many of them are now small farmers.

Pulayan (Cheruman). Low castes who were serfs in Cochin until emancipated in 1854. They are all engaged in field labor--ploughing, sowing, crop watching, and reaping--and are generally paid in kind. Practically all are poor and illiterate and live in huts on the paddy (rice) fields.

There are also in Malabar ancient settlements of Christians, Jews, and Muslims. The Syrian Christian church is said by legend to have been founded by the apostle St. Thomas in the first century of

the Christian era, though Christians probably did not really come into India until three or four centuries later. There are a number of sects within this church. The liturgy is in Syriac, the language spoken in Palestine at the time of Christ. They have their own ecclesiastical hierarchy, although one large group has become affiliated with the Roman Catholic church in recent years. There is also a sizable Roman Catholic population, stemming from the early missionary efforts of the Portuguese. Within the last century Protestant missionaries from England and America have made many converts, especially among the lower castes who have much to gain socially by joining the church.

The colony of Jews centers around the city of Cochin. It is small in numbers but of considerable historical interest. The earliest dated record of this group is from the year 1023 A.D. but they were in the land long before then. During the centuries which followed they gained considerable influence as merchants, but now they are of little consequence in the life of the state. They are divided into three castes which do not intermarry or interdine.

Mohammedan traders visited the Malabar coast in the early centuries of Muslim expansion. They settled there and made converts, sometimes by persuasion, sometimes by force. The main group of Malabar Muslims are called Moplahs (Mappilla). They are a vigorous, occasionally turbulent, people, who fought the British as recently as 1921. Their revolt was put down only after an extended campaign.

Tamil-Speaking Area.

The Tamil area covers the tip of India east of the Western Ghats, and all the regions up to, and a little to the north of, the city of Madras.

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Tamil Brahman. (*494,721). There are many divisions and subdivisions among Brahmans, the major groupings in the south are by language boundaries. Thus Tamil Brahmans are counted as distinct from Kanarese and Telugu Brahmans and from the special kind of Malayalam speaking Brahmans called the Nambudiris (see above).

As elsewhere, the Tamil Brahmans are priests and scholars. Their tradition of learning has enabled them to take on the appurtenances of western life and lore to a greater degree than have other castes.

Chakkiligan (606,775). One of the lowest castes, whose traditional occupation it is to work in leather. Many are now farm laborers or factory employees.

Idaiyan or Yadava (904,695). Shepherds and dairymen. They rank fairly high, many Brahmans will take butter and buttermilk brought by them. They prepare ghi, that is, butter which has been melted and clarified. This fluid is the great source of fat in the upper class diet.

Kallân (509,859). Farmers and field laborers who were by traditional occupation, burglars, marauders, and cattle thieves. As is common in India, men of such criminal castes are employed as watchmen. Indians have found that the best way for honest men to cope with racketeers is to hire them.

Labbai (351,893). A Muslim caste of traders and cultivators of the betel vine. In South India, it is generally possible to distinguish Muslims by the gaily colored wastcloths they wear as contrasted with the white, or once-white, garment of other groups.

Maravan (423,012). Like the Kallans, the Maravans are mostly cultivators who once were cattle lifters. They were also

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* The population figures are from 1931 census of Madras.

soldiers at one time but have not had much military experience during the last hundred years. They make the rounds of all cattle owners in their neighborhood and get protection money from each one. In earlier days, if the fee was not promptly paid, the owner was soon separated from his cattle; today the same practice is followed on a less dramatic scale.

Sengunthar or Kaikolan (414,731). Weavers who are also field laborers, cart-drivers, and traders.

Pallan (825,224). Field laborers who were described in these words fifty years ago--"..though nominally free they are usually slaves in almost every sense of the word, earning by the ceaseless sweat of their brow a bare handful of grain to stay the pangs of hunger, and a rag with which to partially cover their nakedness. They are to be found in almost every village, toiling and working for the benefit of others, and with the Parayas doing patiently nearly all the hard and dirty work that has to be done. Personal contact with them is avoided by all respectable men and they are never permitted to dwell within the limits of a village. Their huts form a small detached hamlet, removed from a considerable distance from the houses of the respectable inhabitants." In the last half century the condition of these people has not changed a great deal.

Paraiyan (1,117,197). The name of this caste, in the form "Pariah" has become a synonym in English for one who is despised by society. Like the Pallans they are field laborers who are on the lowest social levels.

Adi-Dravida (1,619,227) is a term that low castes have come to use in preference to former caste names. It means "original Dravidian." Members of such depressed classes as the Chakkliyan, Pallan, and Parayan often take this caste designation.

Vanniyan, Vanniyakula Kshatriya, or Palli (2,944,014). The greatest single caste of the area. Most are laborers; some farm their own lands; others are engaged in trade or in government service. This caste is relatively well organized and has succeeded in raising its caste rank appreciably. Men of this caste have insisted upon their right to the title of Kshatriya and have reformed previous practices of the caste so that it is more nearly entitled to such designation.

Visvabrahman or Kammalan (524,773). An artisan caste which is divided into goldsmiths, brass-smiths, carpenters, stone-masons, blacksmiths. They are well up on the caste scale, some sub-groups insisting that they have equal rank with Brahmans.

Common occupational terms, each of which includes a number of castes are:

Dhobi	washerman
Durzi (darzi)	tailor
Chetti	trader
Teli	oil presser
Mali	gardener

Telugu-Speaking Area.

This region includes all the districts of the province of Madras which lie to the north of the city of Madras. A large Telugu area not included within this regional survey is the Indian state of Hyderabad. The main Telugu districts are along the east coast from Madras City to the Orissa line.

Adi-Andhra (664,844). The Telugu equivalent of the Tamil Adi- Dravrda. The newer name preferred by many of the depressed classes.

Boya or Bedar (545,066). An old fighting caste whose men are mostly agriculturalists now. Generally an industrious people

but their restless spirit occasionally leads some of them to theft and dacoity. They were renowned for military achievements in the old days but were not recruited into the Indian army in any numbers during the past century.

Telugu Brahmans (472,002). The same as Tamil Brahmans except for language.

Chakali or Tsakala (404,765). Washermen. Each family has its own set of customers, which is handed down in the family line. No other laundryman of this or equivalent caste may muscle in on the familial domain.

Golla (806,479). Dairymen, equivalent to the Tamil Idaiyan or Yadava.

Kaliugi (129,344). Farmers who are fairly high in the caste scale. Some of them wear the sacred thread.

Komati or Arya Vaisya (428,803). The great trading caste of the province. They are merchants, grocers and money-lenders. Literacy is high among them. Many are comparatively well-to-do.

Madiga (612,411). Leather workers, corresponding to the Chakkiliyans of the Tamil area. They are listed among the depressed classes.

Mala (837,718). Another depressed caste, about equivalent to the Paraiyan of the Tamil country. There is great rivalry between Malas and Madigas, as there always is between two large castes of about equal status, especially in the lower ranks of the caste hierarchy.

Telaga (699,039). Farmers who had a military tradition.

Telugu Visvabrahman (373,191). The Telugu equivalent to the Tamil caste of the same name.

Kanarese-Speaking Castes.

Kanarese or Kannada is spoken mainly in the state of Mysore. The population figures for each caste are from the 1931 census of Mysore.

Adi Karnatika (1,000,000). The Kanarese equivalent of Adi-Dravida.

Agasa (109,000). Washermen (see Telugu Chakala).

Banajiga (152,000). Traders and farmers, many of whom belong to the Lingayat sect. (q.v.)

Beda (301,000). The same as Tamil Boya.

Kanarese Brahman (245,000).

Kuruba (431,000). Cowherds, shepherds, and weavers. Many are farmers.

Lingayat (771,000). This is not the name of a single caste, but a general description for several castes belonging to a religious sect. The members of this sect wear an amulet which contains a lingam (phallic symbol). Although the lingam is unmistakably a representation of the male and female genital organs, the members of this sect do not consider it as anything more than a sacred object--about like the ikon of the Greek Orthodox Church.

Uppara (116,000). Farmers and laborers. Many are brick layers, lime workers, artisans.

Vakkalinga (1,312,000). A general name for Kanarese cultivating castes. Those who come within this category are caste Hindus, unlike the Paraiyans who are untouchables.

Oriya-Speaking Areas.

The following paragraphs give a description of the Oriyas by L.S.S. O'Malley, a government official and an eminent scholar.

"The Oriyas recall the old idea of the 'mild Hindu', being a kindly, peaceable and gentle race. A century ago they were described as the most mild, quiet, and inoffensive people in the Company's territories, and this account still holds good. They are somewhat unenterprising, but are not averse to leaving their homes to better their lot, and outside Orissa they have an excellent reputation as domestic servants...gardeners, and laborers. It is astonishing to see what weights Oriya coolies will carry in the jute presses of Calcutta.

"Among them, the old village life may be seen in all its simplicity, scarcely touched by modern influences. Nowhere else does the peasant make such deep obeisance to his superiors; men may be seen prostrating themselves full length on the ground, or throwing dust over their heads, by way of courtesy...they are perhaps the most conservative and priest-ridden, but be it also added, the most religious...They have long been addicted to opium...but the consumption is no longer excessive. They are a sober race..."

Since these paragraphs were written, in 1916, some changes have come about in Orissa. The Congress Party has a large following in the province, caste rules are less stringently observed than before. But the Oriya is still an ardent Hindu. Oriya laborers have emigrated to various parts of India and the Empire wherever cheap and docile labor has been needed. In the hills back of the coastal areas, the hillmen have only just begun to partake of the tools and trinkets of the bazaars and the trappings of Hinduism.

Baniya. The generic name for trading castes.

Bauri. (311,000*). Low caste agricultural laborers.

Bhandari. (120,000). Barbers.

Bhumij. (272,000). Tribe, some of whom have become low caste laborers.

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* Figures are from the 1931 census. Population figures not available for all castes.

Brahman. Highly respected and influential in Orissa.

Chamar. Leather workers.

Chasa (778,000). The great cultivating caste.

Dhobi. Washerman.

Gaura (831,000). Cowherds and other pastoral work.

Gond (256,000). A great aboriginal tribe, some of whose members have become low caste Hindus.

Ho (523,000). Another aboriginal tribe.

Kandra (115,000). Weavers and agriculturalists.

Karan (145,000). The writer caste. Mostly clerks, some are cultivators.

Kayasth. The Beujoli writer caste which has come into Orissa.

Kewat. Fishermen.

Kharia (146,000). Low caste cultivators.

Kumhar. Potters.

Pan (418,000). Low caste cultivators.

Savar. (241,000). Aboriginal tribe.

Teli. Oil pressers.

18. Language.

A. Orissa. The languages of Madras, Mysore, Travancore, Cochin, and Coorg are prevailingly Dravidian; Indo-Aryan languages are spoken in Orissa, where the speech is Oriya.

The following figures for Orissa are taken from the 1931 Census. At that time Orissa and Bihar were combined in a single province. By the 1935 constitution, made effective in 1937, the two were separated into two provinces. To Orissa, with the Indian (native) States administered in connection with it, were added a few small sections of adjacent districts in Madras and the Central Provinces, in which Oriya is the predominant speech. The major purpose in creating the province of Orissa was to bring together in an administrative unit the people whose native language is Oriya, and in this way satisfy a group desire for ethnic unity. It is likely, therefore, that the percentage of Oriya-speakers in Orissa is now higher than in 1931.

Mother Tongues of Orissa

(Total population in 1931 about 9,772,000)

Indo-Aryan		
Oriya	8,302,000	84%
Hindustani	344,000	3½%
Bengali	76,000	3/4%
Others	11,000	
Munda languages*	691,000	7%
Dravidian languages		
Gondi	5,300	
Kandhi (Kui)	134,000	1½%
Oraon	182,000	2%
Telugu	22,000	
Others	800	
Other languages of India	300	
Other languages of Asia	100	
English	1,050	
Other European languages	50	

*The various Munda languages spoken are: Bhumij, Ho, Juang, Kharia, Kora (Koda), Korwa, Mahili, Mundari, Santali.

The language situation in Orissa resolves itself as follows. Oriya is spoken everywhere. In almost all parts of the area there are some persons who speak Hindustani either as mother tongue or as subsidiary tongue. In those interior regions where Munda or Dravidian languages are native, Oriya or Hindustani can serve as the means of communication for foreigners. The native languages which have developed their own system of writing and have literature are: Oriya, Hindustani, Bengali, and other Indo-Aryan tongues; and the one Dravidian language, Telugu. As is usual in India, every town of any size has persons who speak English in a more or less satisfactory manner; but in the remoter regions in the Indian States, where towns are very few, it is not safe to rely on finding such persons. Interpreters speaking Oriya or Hindustani will probably be needed.

B. Madras, Mysore, Travancore, Cochin, Coorg. The native languages of Madras, Mysore, Travancore, Cochin, and Coorg are as follows, (000 omitted; consequently there is a slight inconsistency in grant totals):

	Madras	Mysore	Travancore	Cochin	Coorg	Total
Total population	(47,194)	(6,557)	(5,096)	(1,205)	(163)	(60,215)
Dravidian languages	(43,309)	(5,978)	(5,064)	(1,172)	(155)	(55,678)
Tamil	18,897	307	788	66	3	20,061
Irula	2					2
Korava (or Yerukala), Korama, Karacha	41	6				47
Malayalam	3,727	9	4,261	1,088	15	9,100
Kanarese	1,686	4,579	2	4	63	6,334
Badaga	43					43
Tulu	566	45	3	1	14	629
Toda	1					1
Kota	1					1
*Kui	385					385
Jatapu	20					20

*Largely in sections of the country now transferred to the province of Orissa.

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	Madras	Mysore	Travancore	Cochin	Coorg	Total
Pengo	2					2
Gondi	8					8
Koi or Koya	79					79
Dhruva	2					2
Konda	22					22
Parji or Poroja	39					39
Jhodia	5					5
Telugu	17,783	1,031	10	12	3	18,839
Coorgi or Kodagu		1			45	46
Yerava					10	10
Kurumba					2	2
Indo-Aryan languages	(3,607)	(564)	(27)	(32)	(8)	(4,238)
Hindustani	1,250	390	5	2	4	1,651
Marathi	131	91	7	5	2	236
Konkani	201	16	12	22	2	253
Gujarati (with Saurashtri)	113	5	2	1		121
Oriya	1,847**	1				1,848
Rajasthani	5	60				65
Banjari (Lambadi)	49					49
Others (Sindhi, Punjabi, Nepali, Pashtu, Balochi, Kashmiri, Landha, Bihari)		1	1	1		3
Bengali	2					2
Eastern Hindi	3					3
Panjabi	2					2
Sinhalese	3					3
Sanskrit	1					1
Arabic (with Hebrew and Syriac in Cochin)	3	1	3	1		8
English	39	14	1	1		55
French	1					1
Portuguese	1					1
Others		1				1
Munda languages	(230)					(230)
Saora (Sabara)	183					183
Gadaba	43					43
Bonda and Pareng	4					4
GRAND TOTAL						60,211

**Large number of these returned from areas now transferred to province of Orissa.

The general linguistic situation in South India is that the Dravidian languages far outnumber the Indo-Aryan, though the latter are creeping in--for example, Konkani along the west coast, Marathi in the center, Oriya along the east coast. In northern Madras the prevailing speech is Telugu; in southern Madras it is Tamil; in Mysore and Coorg it is Kanarese; in Travancore and Cochin it is Malayalam. Indo-Aryan languages are also spoken, and nearly everywhere a speaker or two of Hindustani can be found, though in many localities other Indo-Aryan dialects outnumber Hindustani. Indians who speak English are numerous, but an army in South India should provide itself with interpreters in the four major Dravidian languages mentioned above, to be used in the regions specified. Hindustani interpreters, useful in central and northern India, may also be of value in southern India if interpreters of Telugu, Tamil, Kanarese, and Malayalam are not available.

19. Characteristics of the People.

In some ways the people of this area are the most hidebound in the land. Nowhere is the caste system more firmly entrenched. Yet in 1938 the Madras legislature passed the Civil Disabilities Removal Act which guaranteed to untouchables all the rights enjoyed by the general public. The act has no teeth but its very passage is significant. Widely heralded was the Temple Entry proclamation in Travancore, 1936, which permitted low castes to enter--on local option--temples which had previously been barred to them. The influence of tradition is strong and the weight of ancient custom is heavy but there are also elements working for change. Social reform societies are very active; and the strong Congress Party faction advocates certain changes. Christian missions are relatively stronger than elsewhere, higher education is as fully developed as in most other provinces, literacy in Malabar is high. But as long as poverty has a stranglehold on the region, so long will the people cling fast to the old ways which have kept them alive in the past.

The Oriya-speaking folk of Orissa share the same characteristics as the Dravidian-speaking population to the south of them. In the coastal regions of Orissa poverty is intense, caste restrictions are strong, literacy and the standard of life are low. The hills of the Orissa hinterland are populated by primitive tribes who carry on their own culture, and have only recently been affected by developments outside their tribal boundaries.

The Indians of the south have no great reputation for valor or fortitude. They are fractious and litigious. A fight almost always involves verbal blows rather than physical punishment. The castes which formerly upheld a military tradition have been disarmed for the past century and have been discouraged from martial pursuits. Some,

as the Bedar and Kallan, took to dacoity (brigandage) as one outlet for their restive spirits; others as the Nayars, a warrior caste, preserved their vigorous tradition by duelling bouts and body contact games.

Recruitment was stopped during the last century because soldiers from the southern provinces and states made such a sorry showing in the field. But in the eighteenth century and before, troops from the same parts were accounted among the best in the country, and it may well be that other factors, such as poor leadership, caused the falling off in fighting quality. The Nayars form a brigade in the Travancore State Forces. The Kanarese and Telugus under Haidar Ali and Tippu Sultan in the second half of the eighteenth century were able to make strong resistance to the British. Men from other Malabar groups also make fine soldiers. Low caste Tamils have made good records in miner and sapper regiments, while the Marathas--some of whom live in Mysore--are first-class fighters. There are not many men in Coorg, but they have a strong military tradition.

Be that as it may, the present military usefulness of South Indians and other Indians as well depends on certain political and psychological factors. If they continue to hold the same attitude toward the war which was prevalent up to the spring of 1942, the mass of people will again perform their historic role during war. The peasant will remain apathetic and unmoved and will try to continue with his usual way of life as long as possible. When the blast of total war strikes the villagers, they will probably panic, clog the roads, mill around in blind flight. At best they will be a dead weight of reponsibility for the defenders; at worst their panic may seriously hamper military operations.

If, however, the Indian leaders can be made to feel that this is their war, that they have as great a stake in victory as do we, then

indifference may be turned to enthusiasm. It should not be impossible to produce this result. Most Indian leaders do not really feel aloof from this world struggle; they have said over and again that the totalitarian menace is the world's evil, and many of them have expressed their desire to fight the Japs. And Indians have often had a fanatical courage when properly motivated and led.

The Congress Party, during the height of its influence, was able to reach into the villages and mobilize manpower for its political goals. Its appeal, as must always be the case in India, was interwoven with religious as well as political stimuli. Whenever Congress strove toward an immediate goal, its strength rose; when it lapsed into a routine of political activity its strength correspondingly waned. It succeeded in rousing great numbers to non-cooperation, a tactical device something like the technique of sit-down strikes. Otherwise the folk of this region, as in most of India, have awe and respect for authority. Any document or person bearing the seal of the state commands obedience.

From the summer of 1937 to the outbreak of the war, the province of Madras was run by a Congress Party legislature with Mr. Rajagopalachariar as premier. The organization and powers of this government were somewhat comparable to those of United States state legislatures and governors. During this period the Madras government functioned with notable success. The British governor found the legislature competent, the prime minister highly able, and said so. Capacity of South Indians for self-government seems to have been proved.

As throughout India, the United States rated high in the regard of the people. During the Cripps Mission of April 1942, and after, adverse comment from the American press reached India and elicited resentment and sharp retorts. Apparently some Indians had

begun to feel that the United States was in India to bolster or take over British rule. Certain industrialists voiced their fears that American capital would try to find another happy hunting ground in India, and Gandhi publicly mentioned his disquiet about the arrival of United States troops. The Grady mission, however, seems to have allayed many of these fears and regained some of the lost confidence in America. The attitude of South Indians specifically was not different from that elsewhere in the country. If anything, Americans are better known and more highly respected in the south because of the relatively higher concentration of American missions there.

20. Living Conditions.

There are few parts of India with a lower level of subsistence than South India and Orissa. At the top economic level are a few wealthy people; among those families which are counted among the middle classes many have an average income which is less than that of a family on relief in the U.S. The great majority of the people only manage to keep themselves a little above the starvation level.

The articles of diet of the poorer classes in Madras is represented by the food given per day to a male adult prisoner doing hard labor. It consists of the following quantities:

	oz.
Ragi (a cheap cereal something like millet)	15
Rice	5
Dall (a pea like the yellow split pea)	5
Vegetables	6
Oil	½
Tamarind	½
Salt	¼
Curry Powder	½

The market cost of such a diet for one month was calculated to be Rs. 6-4-10 (about $1.90). This sum is well above the monthly expenditure for food by a free laborer.

Middle class dwellings are fairly uniform in structure. The home is one-storied and built to face one of the cardinal points of the compass. The rooms are placed around a central court open to air, from which a small hall leads to the front door. The front door is flanked on either side by a verandah, which is not considered to be a part of the house proper and may therefore be used by the lower class tradesmen, beggars, or others who would pollute the dwelling if they entered the inner court. Most houses consist of a room or two, innocent of plumbing or windows, often constructed of flimsy materials which let in the rains during the monsoon and hold the heat of the torrid season. Among the poor of Madras housing conditions were thus described by an investigating commission: "The huts, which are generally made

of mud or thatch or of old kerosene tins, are low hovels, without any aperture for light or air except a doorway so small that one has to stoop to enter. The average size is 8 feet by 9 feet, though many are smaller. In some cheries (slums) the huts are built back to back, with the result that there is overcrowding of the very worst kind."

Sanitary conditions in the cities are bad. Private sanitary arrangements for each house do not exist in the poorer quarters, and the occupants are entirely dependent on public conveniences if they desire such refinements at all. Many retain the village habit of using any convenient place, even in the city. Those who have given up this village practice frequently find it difficult or impossible to reach a public latrine within reasonable distance of their homes, and are often driven to use the streets or any open space available.

There are thousands in the city of Madras who have no other dwelling than the sidewalk. These are not tramps but ordinary citizens in all respects but the possession of a house. They sleep in the streets during the warm weather and find some verandah or shop front during the rains. In the villages housing is not much better than in the cities; there, too, the houses are huddled together, squeezed tight one against the other by the inexorable bonds of poverty. The one region within the area where living conditions are somewhat better is Malabar. On this plain of the west coast, homesteads stand alone rather than in clusters. Malabar is heavily populated, but nonetheless the fertile land and the benign climate make poverty less oppressive there than elsewhere.

Clothing is as simple as can be. A man requires a loin cloth for wear by day and as a covering for the body by night. A laborer needs two pairs of cloths (loin cloth and head cloth) per year which cost about $1.40. The men of the better-to-do classes usually have a

cotton jacket or two, a change of waist cloth, a pair of singlets for underwear, and several shirts. Sandals or cheap shoes do as foot gear.

Women of the laboring classes also require two cloths a year. Their dress, called "sari," is an uncut length of cloth 7½ yards long and brightly colored. Two such dresses cost a little over three dollars Women of the middle classes wear saris of the same type but of better quality and have a few more of them.

The family budget of the laboring classes makes no provision for anything but the bare animal necessities. There is no provision for comfort of any kind we know, no opportunity for a vacation, nothing to spend on the education of children, no safeguard against sickness or old age, and nothing provided for births, marriages, or deaths. Whenever money is needed to tide the family over any emergency, whether caused by illness, crop failure, or the need for marriage or funeral expenses there is no alternative but to borrow from the village money-lenders. Interests rates are regularly usurious and most of the people struggle under a heavy load of debt. Illiteracy adds to their poverty to make them easy marks for the money lender. A survey of textile, printing, and railway workers in the city of Madras revealed that something like 90 percent were in debt and the amount of the indebtedne was out of all reasonable proportion to income.

Social security legislation is nil.

21. Labor.

Indian laborers are usually migrants from rural areas, but in Madras city there is more of a permanent industrial population than in other cities. The cotton mill workers there have almost ceased to be migratory and large sections of the laboring class community form part of the permanent urban population. This is so because in Madras the migrants are drawn largely from depressed classes whose hold on the land is slight and whose incentive to return to the village is less than among land holding groups. But even so, the Madrasi laborer still feels himself to be a migrant and a stranger in a strange place. He often camps for prolonged periods in the street or on a patch of open ground. When he does get a place in a cheri (slum tenement) he may be, and frequently is, evicted on short notice. Thus he can hardly cultivate any great attachment to his home in the city.

A ramshackle hut of mud or thatch or a flinsy shanty made of flattened kerosene tins seems good enough to a man who feels that he has no security and whose heart is really in some village a hundred miles away. Not infrequently, however, he remains in the city all his life.

Wages are so low that among the laboring population there is scarcely a single family which depends on the earnings of only one person. The wife must piece out the family income with odd jobs or steady work at almost any wage; children are set to work as soon as they can earn a few annas.

The industrial capacity of workers is low but this is not entirely their own fault. Labor has been so cheap that employers have rarely provided labor-saving equipment or advanced technological devices. Bad nutrition, long hours, little comfort do not make for laboring efficiency. Skilled workers are few among the 271,111 industrial workers in

the area under consideration. Nevertheless, intelligent and apt recruits for training in industrial skills are available in large numbers, and the Grady Mission emphasized the great technical ability of Indians.

The Employers' Federation of South India in 1931 quoted to the Royal Commission on Labour the following general wage rates for industrial laborers in Madras city.

	Rs. per month
Unskilled young adults (men)	13 to 14
Unskilled adults (men)	18 to 20
Semi-skilled adults (men)	23 to 25
Skilled adults (men)	35 to 60
Piece workers (men)	30 to 40
Unskilled piece workers (women)	14 to 18

Coolies employed at the harbor earned:

	Rs. per month
Women	12 8 0
Men (8½ hour day)	17 3 0
Men (11 hour day)	20 5 0

In the aluminum factory at Triplicane, Madras, the maximum wage earned by skilled artisans was Rs. 2-8 (75 cents) per day.

Wage increases, called "dearness allowances," have been granted since the outbreak of the war to offset the rising cost of living. Some of the increases in Madras are as follows:

cotton mills: one anna per day to male workers and half an anna per day to women and children.
match making concerns: 6¼ per cent to those earning less than Rs. 50.
municipal scavengers: one rupee per month.

The following table of industrial workers gives the average daily number of laborers employed in factories. A factory is defined as an establishment which employs ten workers or more. Although the figures are for 1938, there is reason to believe that the present employment is not much greater. Certain factories, notably ordance and clothing, have increased as much as 100 percent, but there are only a few of these factories and they account for only several thousand additional workers.

Government Factories	Madras	Orissa	Coorg and Bangalore	Mysore	Madras States
Carpentry			45		
Cotton mills	463			3,700	
Dairy				120	
Dockyards	417				
Electrical Engineering	51			1,292	
Engineering (general)	1,172	241		200	
Forage Presses	60				
Iron and steel mills				2,503	
Ordnance factories	638				
Oil Mills				174	
Printing presses	1,604		25	502	
Railway Workshops				1,019	
Water Pumping Stations	94				
Silk Mills				187	
Woolen Mills	52				
Saw Mills				42	
Miscellaneous	781			1,173	
Total Workers in Gov't. Factories	5,332	241	70	10,912	
Private Factories					
Textiles					
Cotton Mills	68,100			12,006	3,054
Hosiery	1,422			50	
Jute Mills	4,982				
Silk Mills	494			1,103	
Carpet				930	
Misc. textiles	180				95
Coach building and auto repairing	1,515		36	26	22
Electrical engineering	57				
Electrical generating stations	260	18		54	
General Engineering	2,306	106	45	80	383
Railway workshops	11,766	313			
Kerosene Tinning and Packing	804				666
Metal stamping				200	
Tramway works	373		30		
Misc. engineering	294				
Foundries	602			154	
Iron and steel mills	372				
Misc. metal works	1,348				2,964
Bakeries	138				
Brewers and distillers	289	42	69		
Coffee	3,198			152	
Ice and aerated water		134			
Rice Mills	16,189	2,645		411	759

Sugar	1,062			1,146	
Tea				1,521	
Tobacco	5,807		1,149	90	
Water pumping				90	
Misc. food factories	7,549			1,881	3,000
Bone and manure works	931				20
Chemicals	56				
Matches	2,758			80	198
Oil Mills	212	17		391	2,176
Soaps		26		92	
Printing	4,797	230	143	368	147
Misc. paper mfg.	335				127
Bricks and tiles	6,614	67		1,018	3,557
Carpentry	631			112	
Cement	337			22	205
Glass	95	163			
Saw Mills	1,261	26		60	333
Misc. wood and stone work	1,042			60	
Leather and shoes	192				
Tanneries	1,813			235	
Misc. hide works	126			1,120	
Wool baling	14				
Gins and presses	5,822			571	21
Rope works	1,354			55	13,443
Miscellaneous	1,270			353	54
Seasonal Factories					
Textiles					61
Coffee	2,330			170	
Sugar	2,921	517			193
Tea	3,116		15	390	2,329
Misc. food	2,459				40
Matches					74
Cotton ginning and baling	19,328			668	
Rubber	27				82
Total Number of all factory workers	194,335	4,545	1,557	36,671	34,003

22. Public Health, Sanitation and Hospitals.

To be supplied by the Surgeon General's Office.

23. Education.

Literacy in this region ranges from the highest to some of the lowest rates in the country (see paragraph 16). The Malabar Coast, especially Travancore and Cochin, is the most highly literate section of India. In the Orissa states only nine persons out of a hundred can read and write.

A paragraph from a recent treatise on elementary education in Mysore will illustrate the present condition of village primary schools throughout the region.

> The school life in village primary schools is too often marred by stagnation. Such undue retardation is due to several causes--irregular attendance, an unwieldy number of children in the lower classes, faulty methods of teaching, presence of single-teacher schools, lack of enthusiasm on the part of the teachers, low qualification of the teachers, large percentage of untrained teachers on meagre pay, inadequacy of staff, inadequacy and unsuitability of buildings, inadequacy of equipment such as text-books, maps, etc., the debilitating effect of diseases, the ravages of epidemics, isolation of villages, the inadequacy of supervision, the over-emphasis on examinations, and most important of all, the existence of a subject-centric curriculum unsuited to the needs, interests, and capabilities of children. (M. Siddalingaiya, Re-constructing Elementary Education in Mysore, India, 1935)

However gloomy the state of education may be, it is not all to the bad. Both missionary and government schools have taught many South Indians to speak and read English, so that interpreters are fairly plentiful. About three persons in every hundred are able to speak English. University graduates are numerous, especially in the cities, but few have been trained to do more than pass examinations in the poetry of the Romantic period or the philosophy of scholasticism.

The structure of the school system in this area is the same as that given in part 23 of the "Strategic Survey of India".

In the province of Madras alone there are 78 colleges. Most of them are affiliated with Madras University, which means that they try to cram enough knowledge into their students to pass the

examinations set by the University officials. Madras University also has a sizeable teaching staff of its own, as have the other universities in this region, namely, the state universities of Mysore and Travancore, Andhra University at Waltair, Annamalai at Chidambaram.

The number of graduates and undergraduates for Madras in 1938-39, was as follows:

	Graduates	Undergraduates
Arts and Science	1,690	10,586
Law	201	
Medicine	148	1,084
Engineering	56	321
Education	413	
Commerce	43	
Agriculture	41	

The major technical schools in the provinces are the Medical Colleges at Madras and Vizagapatam, the Engineering College at Madras, the Agricultural School at Coimbatore. There is a Science College in Trivandrum, an Engineering School in Bangalore and a Medical College at Mysore.

Education Statistics, 1938-39

	Total number of schools of all kinds	Number of Students	Total Expenditure on Education
Madras	43,300	3,204,200	Rs. 57,099,942
Orissa	9,019	349,402	4,194,651
Mysore	6,988	344,133	
Travancore (1937-38)	3,691	771,302	4,800,000

(Figures are lacking for the Orissa states and the smaller Madras states. In all of these, however, the condition of education is low.)

24. Religion.

The area covered by this survey is predominantly given to Hinduism. The clash between Hindu and Muslim, so significant in Bengal, the Punjab, and Sind, hardly exists in the southeast and south. Rather these last regions are the great strongholds of Hinduism. The huge temple complexes of the south, covering as much as 150 acres, small towns in themselves, with markets, residential streets, and even prostitutes' quarters, as well as the temple buildings, have no counterparts in the north. The great festival of Jagannath ("Juggurnaut") at Puri in Orissa is one of the chief attractions to Hindu pilgrims, and the temple is perhaps the richest of all Hindu shrines.

The following figures for the religious distribution of the area are taken from the 1931 Census (total population of approximately 69,000,000):

(000 omitted)

	Orissa	Madras	Mysore	Travancore	Cochin	Coorg	Total	%
Hindus								
Brahmans	561	2,150	246	68	41	3	3,069	4 1/
Non-Brahman								
Caste Hindus	7,286	32,237	4,770	1,279	613	118	46,303	67
Depressed Classes	1,318	7,299	1,000	1,787	127	25	11,556	16 3/
Total Hindus	9,165	41,686	6,016	3,134	781	146	60,928	88 1/
Muslims	142	3,332	399	353	88	14	4,328	6 1/
Jains		31	30				61	
Buddhist	2		1				3	
Christians	84	1,794	88	1,604	335	3	3,908	5 2/
Jews					1		1	
Tribal	379	349	24	3			755	1

The major religious differences are those found within Hinduism. These are two-fold; one being dogmatic, the other social.

The dogmatic differences are, first, those between the popular village religion with its own deities, and the higher religion of the great gods; secondly, the sectarian division of the higher religion between Shaivas and Vaishnavas, that is, between followers of the god

Shiva and followers of the god Vishnu.

The lower religion is devoted to the worship of a number of deities not officially recognized by the higher religion. These are almost all female and are called "mothers." They are deities of disease, want, agriculture, and other phenomena of living, as distinguished from the great gods who are conceived cosmically as creators, destroyers, or vague personifications of the universal principle of Indian monism. Village male deities are very few, the only one of prominence being Iyenar, a god of war. The village deities are of great age--it is supposed by many authorities that they were worshipped in pre-Aryan times before the gods Shiva and Vishnu had attained their present pre-eminence. Worship to the village gods is by animal sacrifice, and the priests are not Brahmans.

In the higher religion the sectarian division between Shaivism and Vaishnavism means that the worshipper recognizes either Shiva or Vishnu as the supreme deity and essence of the universe, and devotes himself to the worship of that particular god and the minor deities associated with him. Special forms of each deity exist in different parts of the south. At Madura, for example, Shiva is worshipped as Sundareshwara, and his wife Parvati is worshipped as Minakshi. At Srirangam, Vishnu is adored in the form of Raghunatha. One of the most popular gods of South India is Subrahmanya, a form of Shiva's son Karttikeya and god of war.

Followers of the two major sects are distinguished externally by marks on the forehead. The Shaivas wear three horizontal strokes; the Vaishnavas, three perpendicular strokes, joined at the base. The great temples of South India are also sharply differentiated between the two sects. For example, that at Madura is entirely devoted to Shiva and his wife and their children and ancillary deities, while

that at Srirangam, near Trichinopoly, is devoted to Vishnu and his wives and associates. The main image in a Vishnu temple is anthropomorphic or theriomorphic; in a Shaiva temple it may be anthropomorphic, especially of the god as Nataraja (Lord of the Cosmic Dance), or phallic, in which latter form he is most commonly worshiped. The sectarian differences rarely produce violent clashes, though they commonly cause argument and ill-feeling. Among people of the lowest intellectual acquirements, however, the differences are hardly recognized. These worship their own primitive deities, and at best may let the priesthood give their village gods a loose identification with one of the great cults. Slightly more sophisticated, they may consider themselves followers of the great gods, but they do not distinguish between the two sects, and may patronize the temples of both.

The religious social cleavage is between Brahmans and non-Brahmans. Although the non-Brahmans are nearly twenty times as numerous as the Brahmans, the latter have the advantage of education and entrenched position. They have controlled the intellectual and social life of the region for over two thousand years, have been advisers to the rulers, and have had such a monopoly of learning and religion that it was considered an act of impiety to teach a low-caste man to recite the Scripture or for him to learn it. Though the lower castes of Hindus (those below the grade of Brahman) and the depressed classes are differentiated from each other, they feel their joint difference from the Brahmans to be greater. Among the lower castes--Shudras (artisans and laborers) and Untouchables--it is common to try to pass to a higher caste level. Though the caste system is in theory inflexible, in practice it has a certain amount of fluidity. By taking a new name or merely claiming to belong to a Vaishya

(merchant) or Kshatriya (warrior) group, a caste may sometimes succeed in elevating its position (see paragraph 17).

The relatively few Muslims are descendants of invaders from the north; many of them speak a variety of Hindustani.

The large number of Christians, over two-thirds of those in all India, are partly the result of Syrian Christian settlements, partly of missionary labors, first of St. Francis Xavier in the sixteenth century and his successors in Roman Catholic missions, and later extensive Protestant missions from the eighteenth century on.

The Jains, though few in number, are fairly well-to-do. Those in South India belong to the Digambara division of the faith, whose monks are required to wear no clothes at all, and live a more severely ascetic life than do the monks of the Shvetambara ("White-Clothed) Jains. The legend of Jain migration to South India has been mentioned in paragraph 15. The great center of Digambara Jainism today is at Shravana Belgola in the Mysore State, also noted for its Jain temples, and a colossal nude monolithic statue, 70 feet high, of a mythical Jain saint.

"Tribal" religions, largely animistic, are represented chiefly in the backward regions of Orissa and Madras.

25. Public Order and Police.

The province of Madras has a well organized police force of 24,916 men and 1,890 officers (1938). The Inspector-General, highest police official in the province, has six deputies under him. One deputy Inspector-General is in charge of the Madras City Police. Another is in charge of the Railway Police and the Criminal Investigation Department (C.I.D.). The other four are each in charge of one of the four "ranges" into which the province is divided for police purposes. Each range is subdivided into a number of districts which is headed by a Superintendent of Police.

A force of 737 men, 27 Indian Officers, and 2 British Officers called the Malabar Special Police (1938), operated in the districts along the West Coast.

As elsewhere in India, there is a great respect--perhaps fear is a better word--for the law. The crime rate seems to vary with the price of staple food grains. When food costs go up, so does the incidence of crime. Hence an increase in crime may be expected as a consequence of the diminished food supply now in prospect (July 1942). The crime rate in Madras is higher than it is in other provinces; perhaps the poverty of South India is one factor. The incidence throughout India of total cognizable crime per 1,000 of the population (1936) was as follows:

Madras	5.8
Northwest F.P.	5.2
Central Provinces	3.5
United Provinces	2.9
Punjab	2.6
Assam	1.8
Bombay	1.5
Bengal	1.4
Bihar	1.3

Nearly half of all serious crimes are cases of dacoity, which is armed assault and robbery by gangs of men. The bands of

dacoits come from those castes which have a criminal tradition as well as from ordinarily law-abiding classes propelled toward crime by poverty or some extraordinary circumstances. Such bands, if properly organized and motivated, could make excellent guerilla units. No man would confess to committing a dacoity, but volunteers for forays would not be lacking among those who have participated in such affairs.

Riots are a special problem of the Indian police. Factions often arise within a village, and with the passage of years, even of generations, the lines of division harden and the quarrels become progressively more bitter. Sooner or later there is bloodshed. In this area riots occur between Hindu and Hindu mostly, although Hindu-Muslim fights also occur. A few quotations from the Inspector-General's report for 1937 will illustrate the nature of these disturbances:

> ...the action of a Nadar in beating a Kalla youth who sat on a decorated temple car belonging to the Nadars caused a disturbance in which the Nadar was killed.
>
> A regular battle was staged in the Anantapur district when, it is alleged, the Village Munsif (local minor judge) of Mushturu collected 250 men, some of whom were armed with fire-arms and other weapons, and attacked the villagers of Chigicherla and Chintapalle as a reprisal for the failure of the latter to pay customary contributions, which amounted to barefaced extortion, of sheep and grain. The free fight which followed resulted in 3 deaths and in injuries to 20 others.
>
> Thoughtless behavior on the part of a Mohammedan youth of Kadayanallur in the Tinevelly district who sat on a vaganam (ceremonial Cart) during a Hindu festival and would not dismount until forced to do so by the Maravars concerned, precipitated a riot in which much damage to property was caused. A large number of Mohammedans proceeded to the Marava quarters, set fire to their houses and seized whatever property came to hand.

The incidence of riots too, seems to follow the rise and fall in the cost of living.

Police organization and criminal affairs in Travancore, Cochin, and Mysore are not greatly different from that described for Madras. The Orissa police force numbers 4,009 men (1938).

26. Press, Propaganda, and Censorship.

The leading newspaper of the region and one of the best in India is The Hindu published in Madras City. It is an Indian-owned independent journal which generally sympathizes with the official Congress Party point of view although it feels free to criticize their position and does so. This paper frequently reprints articles from such American periodicals as Harper's, The New Republic, and Time. Even more than other papers in India, The Hindu plays up news and views from the U.S.

The Madras Mail is a conservative paper which represents the interests of British businessmen and planters. Its circulation is relatively small and its influence meagre.

The Indian Express (Madras) is a supporter of the Congress as is its associate Tamil paper Dhinamani (Madras). Swadesamitran (Madras), a Tamil daily, speaks for the conservative right wing of the Congress. Justice, a weekly, is most interested in getting a proper share of posts and kudos for non-Brahmans.

The Indian Review, published by G. A. Natesan in Madras, is a respected monthly. It is something like The Atlantic Monthly or Harper's in the U.S. and carries a good deal of political interpretation and news comment.

The great majority of the press upholds the nationalist point of view.

Although circulation figures of the vernacular press are low compared to those in the U.S., it has a great influence. It is a common sight to find villagers grouped around one individual who is reading the newspaper aloud. No sooner do three or more bus drivers congregate around a bus stand than they are squatting on their heels, to read the paper or relay the news of the day second hand.

Radio is of lesser, though growing importance. The radio stations of the region are VUM and VU in Mysore, VUT in Trichinopoly. No figures are available to indicate how many of the 150,000 radio sets in India are concentrated within this region.

Censorship operates in the same way as in other sections of the country. The press is held liable and responsible for the publication of any material which may not meet with the approval of the government. All incoming news wires from abroad are censored as are all outgoing dispatches.

The leading newspapers and periodicals of the area are listed in Appendix I.

The general observations on propaganda in India which are given in paragraph 26 of the "Strategic Survey of India" apply as well to South India. Because a great many of the Indians who suffered from Japanese cruelty in Burma came from Madras and Orissa, the people in this area are probably even more anti-Japanese than in other parts of the land. The Moslem problem hardly exists here, hence South Indians are less troubled by the virus of communalism (i.e., religious antagonism) than is the case in North India. American missions have been long established in South India and have gained considerable respect. All in all, the folk of this section respond favorably to the aims and messages of the United Nations.

Section IV

POLITICAL

27. General.

When the war between Britain and Germany broke out, the Madras and Orissa Provincial Legislatures both had Congress party majorities and the ministries were composed of Congress party members. In October, after the Governor General of India had declared India in the war, without consulting the Indian Legislative Assembly, the Indian National Congress had its ministries resign in the provinces where it controlled the legislatures (see Survey of India, paragraph 27). The resignations were accepted in the first week of November, and the Governors of the provinces suspended the constitution and assumed the whole governmental power as provided in the Government of India Act of 1935. The Madras province is still being governed in this fashion, but in Orissa a new ministry was formed on November 23, 1941, on coalition lines. Neither of these provinces has since been the scene of any special political activity beyond the kind of general activity indicated in the Survey of India, paragraph 27.

When the Cripps mission failed, in April 1942, and Indian politics fell into a state of confusion even greater than before the mission arrived, the Congress Working Committee decided to give no support to the war effort but to oppose any Japanese invasion with nonviolent resistance. At the same time the Working Committee of the Congress disapproved of any separation of India into Hindu and Muslim states. Mr. Rajagopalachariar, however, Prime Minister of Madras while the Congress government had been functioning, and second only to Gandhi and Nehru in importance in nationalist circles, bolted the all-India Congress on these two issues. He advocated making full armed resistance to the Japanese and giving marked concessions to the

of a chief justice and thirteen puisne judges. For administering criminal justice there are 28 sessions judges in the province, who may be aided by additional and assistant sessions judges, to be appointed as needed. With these are District Magistrates, Subordinate Magistrates, and Honorary Magistrates. Civil justice is administered by 26 District Judges, 34 Subordinate Judges, and 140 District munsiffs (somewhat analagous to a justice of the peace). In Madras there are two city civil courts with five judges between them.

In the rural areas the village is the unit of local self-government. District boards consist of elected members. Municipalities are governed by councils. Madras has special organization with a mayor and deputy mayor and aldermen. Its council has 65 members, of whom three are labor representatives and two are representatives of the depressed classes.

The Governor of Orissa is H.E. Sir William Hawthorne Lewis, K.C.S.I., K.C.I.E., I.C.S. The ministry, formed November 23, 1941, consists of the Maharaja of Parlakimedi as premier, and Pandit Godavaris Misra and Maulvi Abdul Sobhan Khan as other ministers. The High Court for Orissa is that at Patna in Bihar, with which Orissa was combined in a single province until 1937.

Coorg is a chief commissioner's province, that is, it is administered by the Governor General through a chief commisioner responsible directly and solely to him. The chief commissioner is J.W. Pritchard, I.C.S.

The Indian State of Mysore is ruled by its prince, and administered under his control by an Executive Council consisting of the Dewan (prime minister) and two other members of council. There is a lower house, called the Representative Assembly, composed of

representatives of the electorate. This body may make representations of grievances, question ministers, and recommend principles of legislation. A second house, known as the Legislative Council, may vote on measures submitted to it by the government. The latter house has 50 members, of whom 20 are official. There is a High Court, composed of a chief justice and three justices, which sits at Bangalore.

The Indian (native) State of Travancore has a two-chamber legislature, the lower one called the Sri Mulam Assembly and the upper one the Sri Chitra State Council. Both have a majority of elected non-official members. Both chambers may vote on the budget, move resolutions, and ask questions.

The state of Cochin has a Legislature with limited powers similar to those of the Mysore and Travancore legislatures.

Lesser states are Pudukottai, Banganapalle, Sandur, and the Orissa States. Of these Sandur has a State Council to initiate legislation.

29. Political Parties.

The chief internal political agitation and struggles in this area, as distinguished from the perennial conflict between Indian nationalism and British imperialism, have sprung from the social desires of the non-Brahmans to establish themselves against the Brahmans and the nationalistic desires of the Kanarese-speaking people to be made into a political unit. Both of these struggles are confined to South India, and do not exist in Orissa.

The non-Brahman caste Hindus, mostly Shudras, having achieved in their community a certain measure of economic and educational standing, had thereby gained franchise qualifications under the 1919 constitution. They capitalized these acquisitions by contesting elections on the basis of non-Brahmans against Brahmans. Their success was surprising, and for a number of years they won enough seats in the Madras Legislative Council to have control. But in 1937, when the first elections were held under the 1935 constitution, the Congress Party made a vigorous effort to solidify its position by capturing the legislature, and did so. It stood, not as the party of a single section of the community, or any caste or class, but as representative of all groups, drawing from all and representing all, and it gained a majority of the seats. The Justice Party and others like it, through which the non-Brahmans had operated, had broken the hold of the Brahmans on South India's political structure; Congress then took over for both the former antagonists. Today Madras is practically a one-party region, like our own South. The leader of the Congress Party in Madras is Mr. C. Rajagopalachariar, who until late in 1939 was premier of Madras but resigned then when the Congress ministries resigned throughout the country.

The Untouchables also have carried on a social struggle in

South India. For the most part their economic and educational level has been too low for them to enter politics successfully, though they have had a great deal of backing from Gandhi and the Congress. One of their most dramatic demonstrations took place at Vaikom, in the Travancore state, in 1924-25. There a public road, open to caste Hindus, was forbidden the Untouchables because it passed a temple. The Untouchables vowed themselves to a non-violent campaign of persistence (satyagraha) to gain the right of using the road. Though arrested and beaten by the police, they kept on marching down the road for months, until at last they won. In 1936 the Travancore government went still farther and gave the Untouchables the right of temple entry, as well as the use of public roads and village wells. So much have these people won for themselves!

Those areas of Madras, Mysore, and Bombay where Kanarese is the dominant language have been agitated for many years by a demand that their ethnic unity be delineated in a political province. So far that movement has been unsuccessful, but it has behind it a certain amount of the logic that led to the creation of Orissa as a province to include all those regions where Oriya is the prevailing mother tongue.

In Orissa the Congress Party has also been the supreme party, but its organization has never reached as high a state of efficiency as had that in Madras. The recent formation of a ministry was a compromise, which shows that the Congress was not so strong as in Madras and other provinces.

In the Indian (native) States political parties have very little function. The Congress Party agitates in those areas, but has no political organization in the legislative bodies which it can use to advance its own purpose.

30. Foreign Policy and International Relations.

The separate provinces of India and the separate Indian (native States have no foreign policy or international relations, but are governed in all such matters by the central Indian government. It happens that Orissa and Madras have been two of the chief sections of India from which labor has emigrated to other parts of the British Empire, notably Burma, Ceylon, Malaya. The government, particularly of Madras, has been concerned about the treatment of these emigrants, and has instigated the government of India to undertake inquiries on their behalf. Otherwise the questions of foreign relations of the area treated in this survey are covered in paragraph 30 of the Survey of India.

Attitudes toward Americans in eastern and southern India, as in the rest of India, are universally favorable. In Madras are located some of the oldest American missions in India, and these have generally been well received by the Indians. The achievements of Americans are appreciated, and their motives accepted as democratic and disinterested.

Though provincial politics is not concerned with international questions, it is probably significant for the United States and the other United Nations that C. Rajagopalachariar, leading member of the Indian National Congress to support Indian participation in the war, comes from Madras. He, like the rest of Congress, wants liberty for India; but, unlike the Congress Working Committee, he also wishes to oppose Japanese aggression by force instead of non-violence. He has left the Congress Working Committee for this reason. His desire is that the actions of India on the war should harmonize with that of the other United Nations, and he may, therefore, be considered a friend of the United States.

Section V

ECONOMIC

31. General.

The economy of Madras, Orissa, and Mysore is almost purely agricultural. The overwhelming majority of the people are villagers, engaged in the cultivation of food crops like rice and millet, and of commercial crops, like groundnuts, sesamum, and tobacco. The average annual production of rice is 6,000,000 tons; of millet more than 2,000,000 tons. Smaller quantities of the following crops are produced: sugar cane, 394,000 tons; gram 100,000 tons; and maize 34,000 tons.

Groundnuts (peanuts) are the largest of the commercial crops, with an average annual yield of 1,600,000 tons; then follow tobacco 133,000 tons; sesamum 107,000 tons; cotton 450,000 bales (400 lbs. each).

Compared with the rest of India, the Madras-Mysore-Orissa area is not outstanding in the production of any of India's major crops--rice, wheat, cotton or jute. But the area does lead in the production of oilseeds, particularly groundnuts, and in coffee and rubber. The area does not produce enough food to supply its own needs, and for many years now has been a large importer of rice from Burma. In 1938-39 Madras province was a net importer of more than 600,000 tons of rice from Burma.

A. Livestock. Like the rest of the country, the Madras-Mysore-Orissa area has a great excess of livestock. Although data for Orissa is not in usable form, the statistics for Madras, the Madras States, and Mysore are clear enough: in 1935 they had a total of 54,772,000 head of cattle, buffaloes, sheep, and goats; in detail, there were 23,437,000 cattle, 7,957,000 buffaloes, 15,007,000 sheep and 8,371,000 goats. Popular prejudice against the slaughter of animals for meat is at

least as strong in the Madras-Mysore-Orissa area as it is in any other predominantly Hindu part of the country. (See Section 31 of the Strategic Survey of India, and of the Strategic Survey of Northeast India).

B. Mineral Resources. The Madras-Mysore-Orissa area does not contain the wide range of minerals necessary to support modern heavy industry. Petroleum seems to be entirely lacking, and there are no large coal deposits now being worked in any part of Madras, Mysore, or the Madras States. The nearest mines from which coal can be hauled for the Madras railroads are at Singareni in eastern Hyderabad; in peace time the bulk of the coal used on the Madras railroads came from the Bengal-Bihar coalfields by a combined rail-and-sea route, and from South Africa by sea. At present coal must be hauled by rail all the way from the Bengal-Bihar fields.

Iron ore is found at Bhadravati in western Mysore, where some 35,000 tons are extracted annually. (The extensive iron ore deposits in northern Orissa have already been mentioned in paragraphs 31 and 32 of the Strategic Survey of Northeast India).

Mica is extracted and dressed in the Nellore District of Madras; in the year 1938 about 23,000 cwts. of dressed mica and 33,556 cwts. of waste mica were produced. Manganese is mined in Sandur State, in Madras, and in Mysore; these areas yielded in 1938 more than 150,000 tons of manganese. Although there are extensive deposits of bauxite in the Salem District of Madras, and in Travancore, they are not yet being worked. The Aluminium Corporation of India should soon put into production its long-planned aluminium smelter at Alwaye in Travancore.

The following table furnishes statistics on the production of the minerals in 1938:

Mineral	Quantity	Region of Production
chromite	16,969 tons	Mysore
magnesite	25,611 tons	Madras and Mysore
ilmenite	252,220 tons	Travancore
monazite	5,221 tons	Travancore
zircon	1,450 tons	Travancore
gold	321,115 fine oz.	

C. Forest Products. The Madras-Mysore-Orissa area contains a wide range of both hard and soft woods, of which the most important is the world-renowned teak. More than 28,000,000 cubic feet of all types of wood were cut in 1938-39 in Madras and Orissa. Although the Madras-Mysore-Orissa area possesses more saw mills and employs more sawyers than any other region in India, the industry is nevertheless not well organized and does not operate on a large scale.

The Orissa states are one of the chief lac producing areas in India; this crude lac is the basis for shellac, of which India is the world's chief source. Coir, a fibre made from the husk of the coconut, is a forest product obtained chiefly in Travancore and the rest of southern India. More than 850,000 cwts. were exported in 1939.

D. Fisheries. The Madras-Mysore-Orissa area contains the greatest number of fishermen in India. According to the Census of 1931, fishing was the chief occupation of more than 200,000 persons. Although fishing methods are primitive, enough fish are usually caught to permit the export of small quantities from Orissa to Calcutta, and from Madras to Burma and Ceylon. Along the Madras coast are scattered 105 fish-curing yards, which in 1938-39 handled 1,016,465 maunds (about 41,000 tons) of fresh fish. Figures are not available on the total annual catch of fish.*

*Mr. Radhakamal Mukherjee, Food Planning for Four Hundred Millions (London, 1938), p. 24, estimates India's total fish supply at 700,000 tons annually.

32. Manufacturing.

General. The Madras-Mysore-Orissa area, with a population of more than 75,000,000, contains less than 300,000 factory workers. Yet it is the third largest industrial area in the country, possessing one important industrial center, Bangalore City, and a number of secondary centers. At the end of 1938 the total number of factories, including seasonal tea and coffee plants, was about 2,350. The only industry of any size is textiles, heavy industry is almost entirely absent.

Madras. The premier city of South India is Madras, with a population of 777,000. Most of its industry, however, produces consumer goods, and only a few of its plants have direct military significance. Its largest factory, for example, is the Buckingham and Carnatic Cotton Mills, with a labor force of about 9,000. The city has a 34,000 KW steam power plant, three very small electric engineering workshops, and eight general engineering shops, the largest of which, Binny and Co., employed in 1938 more than 300 men engaged in foundry work, welding, and machine shop work. The tramways workshop employed at the end of 1937 more than 350 men, while the Madras Port Trust Workshop employed 269 men. Ford Motor Co. maintains a small assembly plant in Madras which now employs about 80 men and can turn out about 500 one-ton trucks and small ambulances per month. (For the large Perambur railway workshop see below).

Bangalore. Bangalore City, with a population of 440,000, is the largest city in Mysore State. It is also the administrative capital of Mysore State, and the chief industrial center in the Madras-Mysore-Orissa area. Of all the Indian (native) States, Mysore has done the most to promote the development of industry. The government of Mysore is the sole owner of at least a dozen factories, including

the small but significant Mysore Iron and Steel Works at Bhadravati (see below) and is a shareholder in another dozen concerns. It is reported that the Mysore government would have been willing to participate in the formation of an automobile manufacturing company had the government of India not disapproved of the project.

Bangalore City and its environs contained, in 1940, 165 industrial establishments, employing 1,800 persons. Since then the Hindustan Aircraft Company has built, in Bangalore, a plant which is perhaps the leading military installation in South India. It is now entirely owned by the government of India. The factory had in October 1941 a floor space of 150,000 square feet, which by now should have been increased to 252,000 square feet. By October 1941 the company had already trained 2,000 Indian workmen in the building of aircraft wings and fuselage, and in the assembling of planes; the supervising staff is largely American. Another 2,000 men were employed on building construction and similar work. Because of the absence of heavy industry in South India generally, the aircraft plant has been designed to be as self-sufficient as possible (except for the manufacture of engines, which is not contemplated). The company has its own aircraft designing and engineering staff, one of the best all-around machine shops in India, and a whole series of auxiliary industries. In addition, the company has built an artificial lake and installed facilities for the repair of large flying boats and amphibians.

Early in 1941, the Government of India purchased a one-third interest in the company, and reviving a previous contract, ordered 48 Curtiss-Wright 75A fighter planes, 24 Vultee "Vengeance" bombers, and 30 "Harlow" trainers. No matter what the success of the company as an assembler of aircraft, there can be little doubt that its

facilities make it an excellent aircraft repair and maintenance establishment.

Besides the aircraft factory, Bangalore City contains a paper mill, a chrome tanning plant, a lamp works, an electric goods factory, several textile mills, a soap works, and a half a dozen other plants of some consequence.

Mysore City. Although it has no single outstanding factory, Mysore City does have 89 establishments of all types, employing 13,000 persons. Among the newest of Mysore City's plants is the Chemicals and Fertilizers Factory, which produces small quantities of sulphuric acid, ammonium sulphate, and sodium bichromate.

Bhadravati. Bhadravati, in western Mysore, is the site of the only iron and steel factory in India that is not located near the Bengal-Bihar coal fields. The plant itself is very small, having only one blast furnace fired by charcoal, not coke. During the year 1938-39 it turned out 27,134 tons of pig iron and 23,633 tons of mild steel. Plant equipment includes wood distillation and by-products recovery plant, pipe foundry, open hearth steel furnace, rolling mill, general foundry, machine shop, and reserve steam power plant. A new rolling mill was ordered some time ago from England.

The plant itself employs 2,000 men, 500 more mine iron ore in the rich Bababudan Hills nearby, and another 5,000 cut wood in the forests. A cement plant is connected with the iron and steel works.

Kolar. Kolar, in eastern Mysore, is the site of the only gold fields now being worked commercially in India. Its 24,500 workmen produced some 320,000 fine ounces of gold in 1938-39.

Aryankadu (Aruvankadu) in the Nilgiri Hills contains the government Cordite Factory, which employed some 750 men before the war. Efforts have been made to step up the production of cordite to 260 long tons per month.

Harihar. Harihar, in northern Mysore, contains a newly-opened machine tool factory, the Mysore Kirloskar, which has started operations on a very modest scale.

Railway Workshops (Perambur, Golden Rock, Arkonam, Mysore City). The Madras-Mysore-Orissa area has four railway workshops. These consist of the broad gauge Madras and Southern Mahratta Railway Shop at Perambur, west of Madras; the metre gauge South Indian Railway shop at Golden Rock, east of Trichinopoly; the broad gauge Madras and Southern Mahratta Railway Shop at Arkonam, west of Madras; and the metre gauge Mysore State Railways Shop at Mysore City. The first two of these shops (Perambur and Golden Rock) employ 5,000 and 3,800 men respectively; the other two, less than a thousand each.

Textile Centers. Towns important for their textile factories are Coimbatore, Madura, Papanasam, Singanallur, and Vizagapatam.

33. Utilities.

A. Power Plants.

The chief power plants of the Madras-Mysore-Orissa area are hydro-electric and have already been described in paragraph 33 of the Strategic Survey of India. The only large steam plant is that of the city of Madras, with a capacity of 34000 KW; it is dependent on coal brought from the Bengal-Bihar coalfields by rail or sea. Many of the smaller towns of the area have small power plants based on diesel engines--e.g., Madura, Mangalore, Bezwada, Cochin.

B. Water Works.

Madras is the only city in the Madras-Mysore-Orissa area about whose water supply we have some detailed information. The chief source of water is the Corteliar River, which has been dammed about 17 miles northwest of Madras. Water from the river is stored in tanks at Red Hills and Sholavaram; these tanks also receive a considerable supply of water from their own catchment area. In the 1920's this system supplied Madras with 5,831,000,000 gallons of water per annum. Almost half as much again was distributed to nearby areas for irrigation. West of the city is a chlorination and filtration plant, and a pumping system to keep up water pressure.

Besides Madras, at least four other cities of South India have water works systems--Bangalore, Mysore City, Madura, and Tanjore.

C. Gas Works.

There is no gas works serving any of the cities in Madras-Mysore-Orissa.

D. Ice Plants.

In all of Madras-Mysore-Orissa there were listed in 1937 only three ice and carbonated water plants: one each in Madras, Cuttack, and Balasore.

E. Sanitary Installations.

A modern sewage system in Madras has been in the process of installation for the past quarter of a century. It is an underground system, with street sewers gravitating toward pumping stations, which in turn force the refuse through mains to a sewage farm in the north-east corner of the city. This system is still incomplete, particularly in the poorer and most crowded areas of the city, where private latrines and toilets are few and public latrines entirely inadequate. The result is that the streets and lanes of the slum areas of Madras are continually littered with human excrement.

Although detailed information on the other cities of Madras-Mysore-Orissa is lacking, their sanitary installations are said to be extremely meager.

34. Railroads.

The Madras-Mysore-Orissa area is served by three broad gauge trunk railroads radiating from Madras, and by three metre gauge systems. Madras is connected with Calcutta by the Madras and Southern Mahratta broad gauge line which runs 485 miles northeast from Madras to Waltair, where it meets the Bengal-Nagpur railway that continues on up the east coast to Calcutta. Madras is connected with Bombay by another branch of the Madras and Southern Mahratta railway, which runs 351 miles northwest from Madras to Raichur in southern Hyderabad; there it meets the Great Indian Peninsula railway, which continues northwest to Bombay. The third trunk line leading out of Madras runs westward, then loops to the southwest, and finally runs northward along the west coast (Malabar Coast) up to Mangalore. The first 133 miles of this line are operated by the Madras and Southern Mahratta railway; the rest of the line, which includes a branch to the port of Cochin, is operated by the South Indian Railway.

The chief metre gauge railway in the Madras-Mysore-Orissa area is the metre gauge division of the South Indian Railway, which serves the area south of the Madras-Mangalore broad gauge line. The South Indian Railway's metre gauge lines radiate from Trichinopoly to almost every port in southernmost India except Cochin. The Madras and Southern Mahratta metre gauge lines serve northern Madras and southern Bombay provinces. One line runs from the second-rate port of Mormugao (in Portuguese Goa) right across the Indian Peninsula to the minor port of Masulipatam on the east coast. This line crosses the broad gauge Bombay-Madras railroad at Guntakal in north central Madras province. From Guntakal one section of the Madras and Southern Mahratta metre gauge railroad runs south to Mysore, while another section branche off the Guntakal-Mysore line and runs southeast to Katpadi on the

Madras-Mangalore broad gauge railroad. Finally, there is the Mysore State metre gauge railway, whose lines run from Bangalore City northwest to the southern Bombay province, southwest to Mysore City, and north toward Guntakal.

All of the above systems operate about 4,200 route miles in the Madras-Mysore-Orissa area. In detail, the South Indian Railway operates 632 miles of broad gauge line and 1,868 miles of metre gauge line; the Madras and Southern Mahratta Railway 1,123 miles of broad gauge line and 1,000 miles of metre gauge; and the Mysore State Railway 609 miles of metre gauge line.

The main sphere of operations of all the railroads described above is the Madras-Mysore-Orissa area; there are, however, two additional railroads which enter the area, but whose main sphere of operations is elsewhere. The Bengal-Nagpur Railway runs the broad gauge line from Waltair (in northeast Madras Province) along the coast to Calcutta; it also operates a branch line from Vizianagaram, just north of Waltair, northwest to Raipur which is on the main Calcutta-Nagpur line of the Bengal-Nagpur Railway. The main east-west broad gauge line of the Nizam of Hyderabad's State Railway ends at Bezwada, an important communications center on the Kistna River in northern Madras.

Value of the Network. The network of railroads in the Madras-Mysore-Orissa area is more poorly integrated than that of any other major area of India. First, there is no line linking the west coast of Madras with the west coast of Bombay; to go by sea from Mangalore, railhead of the South Indian Railway on the west coast of Madras, to Bombay is a trip of 412 miles--but by the only through rail route the journey between Mangalore and Bombay is 1,260 miles. Second, the areas served by metre gauge railways of Madras and Mysore are separated

by the broad gauge Madras-Mangalore line; the sole connection between the metre gauge railways north of the Madras-Mangalore line and those south of it, is at Katpadi, 81 miles west of Madras. Third, not only are all of the broad gauge lines single-tracked, but they have very few branches, leaving large sections of the area entirely untapped. Fourth, the metre gauge lines are also only single-tracked, though they do have more branches than the broad gauge lines. (The main exceptions to the statement that all lines in the Madras-Mysore-Orissa area are single-tracked, are two short stretches leading west and south from Madras.) Fifth, the long coastal railway from Madras City to Calcutta (900 miles in Madras and Orissa alone) is intersected at only four points in Madras and Orissa by railroads running from the interior down to the coast.

Condition of Equipment and Rolling Stock. General remarks on the steady deterioration of the rolling stock of all the Indian railroads have been made in the Strategic Survey of India as a whole. These apply without modification to the railroads of Madras-Mysore-Orissa, and they have recently been underlined in the report of the Grady Mission to India. The Mission stated that the freight car building program in India was one year in arrears because of inability to obtain essential equipment from the United Kingdom; that the locomotive building program was quite inadequate to meet India's requirements; and that imports of locomotives ordered from the United Kingdom had been long delayed.

Rolling Stock. The rolling stock on the broad gauge lines in the Madras-Mysore-Orissa area forms part of the rolling stock of all the Indian broad gauge lines, for the broad gauge railways of India are interconnected and freight cars pass from one system to another. This is not the case with the metre gauge railways, for there is no connectio

between the metre gauge railways of southern India and those north of the broad gauge Bombay-Calcutta line. Besides the three metre gauge lines already described--the Madras and Southern Mahratta, South Indian, and the Mysore--the only other metre gauge line in South India is the Nizam's (Hyderabad) State Railway. Thus the four metre gauge lines of the south should really be viewed as one unit, and the figures on metre gauge rolling stock given below include the Nizam's State Railway.

Rolling Stock on Broad Gauge Lines

	Madras and Southern Mahratta	South Indian
Locomotives	302	153
Total Tractive Effort (in lbs.)	7,750,430	3,431,270
Passenger cars	570	319
Freight cars	6,047	2,289

Rolling Stock on Metre Gauge Lines

	Madras and Southern Mahratta	South Indian	Mysore State	Nizam's State
Locomotives	320	381	86	83
Total Tractive Effort (in lbs.)	5,431,459	5,506,457	1,337,579	1,269,761
Passenger cars	813	1,297	313	130
Freight cars	6,546	4,723	1,453	1,302

For details of gradients, curves, rolling stock, and other topics, see "Strategic Survey of Northeastern India: Bengal and Assam," Appendix VII; and "Strategic Survey of India," paragraph 34.

Carrying Capacity. Recent reports on the carrying capacity of the Indian railroads are summed up by the Grady Mission: "The railways of India are now seriously overburdened and evidences of an

actual breakdown are becoming increasingly apparent." So far as the railways of the Madras-Mysore-Orissa area are concerned, they are all small systems, and carry much less freight than the big lines. In terms of net ton miles in 1940-41, the Madras and Southern Mahratta broad gauge lines were first with 1,155,880,000 net ton miles; they were followed by the Madras and Southern Mahratta metre gauge lines 391,152,000; the South Indian metre gauge 374,671,000; the South Indian broad gauge 295,755,000; and the Mysore State metre gauge 102,828,000. By way of contrast, the Great Indian Peninsula Railway (broad gauge) reached 3,413,015,000 net ton miles in the same year.

The average number of miles a ton of goods was hauled in 1940-41 is shown in the following table:

Railroad	No. of Miles
Madras and Southern Mahratta	
A. Broad Gauge	249
B. Metre Gauge	176
South Indian	
A. Broad Gauge	116
B. Metre Gauge	105
Mysore State Railways	103

Although congestion on the Indian railways has been increasing, the members of the Grady Mission have stated strongly that much can be done to improve their operation, and that American railroad experts should be sent to the country to survey the scene and make recommendations.

35. Roads.

The Madras-Mysore-Orissa area is better supplied with all-weather roads than any other part of India. The total number of miles of all-weather roads in India in 1939 was about 97,000, of which some 42,000 were in the Madras-Mysore-Orissa area. Most of India's all-weather roads, however, are not first-class roads, judged by American standards. They are, chiefly, macadam roads with no top surface of tar, asphalt, or concrete. The following table shows the distribution of roads, both all-weather and fair weather, in the Madras-Mysore-Orissa area:

Roads in Madras-Mysore-Orissa

Province or State	Dirt Roads (Fair weather)	Gravel	Macadam (unsurfaced)	Asphalt, tar, cement, etc.	Others	total
Madras	3,628	5,911	23,850	144	342	33,875
Mysore	1,366	1,583	4,088	21		7,058
Travancore	?	2,513	1,032	1		3,546
Other Madras States	512	584	779	7		1,882
Orissa	1,105	672	2,030	23		3,830
Orissa States	2,040	175	103		220	2,538
Total	8,651	11,438	31,882	196	562	52,729

Road Network. The network of roads in Madras and Mysore is well-developed and well-integrated, particularly south of 15°N. latitude. A whole series of roads zigzag across the peninsula from east to west, and are linked to each other by numerous north-south roads. The Madras Route Book of the General Staff of the Indian Army--issued in 1934 and revised to 1937--lists only two highways as suitable for "heavy military traffic," i.e., for vehicles whose total gross weight does not exceed 7 long tons. The first of these highways is the Madras-

Bombay trunk road, which runs west from Madras to Bangalore, and then northwest via Chitaldrug and Harihar into Bombay province. The other road suitable for "heavy" military traffic is the 178-mile stretch southwest from Madras to Trichinopoly. Even on these roads, which are among the best in South India, some unbridged rivers are encountered.

A great many other roads are described in the General Staff Route Book as suitable for "light military traffic," i.e., for vehicles whose total gross weight does not exceed 4 long tons. The longest of these is the coastal road from Madras to Calcutta; many large rivers on this route are bridged only for railway traffic. The most central of the roads suitable for light military traffic is that running from the important industrial and military city of Bangalore north via Kurnool to Hyderabad, the chief military station in the peninsular part of India. Among other routes listed for "light" military traffic are Trichinopoly-Madura-Tinnevelly-Trivandrum, Trichinopoly-Coimbatore-Cotacamund, and Bezwada-Hyderabad.

The chief deficiency in the road network is the fact that the road along the west coast from Cochin north to Bombay province is incomplete, of poor quality, and intersected by innumerable unbridged rivers. Thus the only good communication along the west coast from Madras province up to Bombay province is by sea, since both rail and road facilities are poor or absent.

Busses and motor Vehicles. Information on routes of the innumerable bus lines in the Madras-Mysore-Orissa area is difficult to obtain, but first hand observers report that buses seem to run wherever there are all-weather roads. The following table gives details on the number of vehicles in the area in January 1939; the figures on carts refer to 1935.

Motor Vehicles: Madras, Mysore, Orissa

Province or State	Private Cars	Taxis	Buses	Trucks	Motor cycles	Total
Madras	14,008	367	4,119	1,747	1,319	21,560
Orissa	690	see buses	286	100	105	1,181
Mysore	3,238	90	585	375	468	4,756
Travancore	1,583	179	1,081	454	603	3,900
Cochin	450	80	195	30	50	805
Pudukkotai	419	7	103	11	5	545
Total	20,388	733	6,369	2,717	2,550	32,747

Carts

Madras	1,193,665	
Bihar and Orissa	625,394	(no separate returns)
Mysore	267,404	
Madras States	41,031	
	2,127,498	

Motor Repair Facilities. Motor car repair shops are few in Madras-Mysore-Orissa, and those that do exist are small. At the end of 1937 there were only 18 motor car repair shops in the area. Three of these (two in the city of Madras and one in Madura) employed more than 100 workers; less than 100 workers were employed in the other shops: Coimbatore, Ootacamund, Vizagapatam, Karaikkudi, Bangalore, and Kadur. No information is available on garage space.

36. Shipping.

The coastline of the region under survey, reaching from Mangalore around Cape Comorin to Puri, includes a major part of the total coastline of India. There are only two ports of any consequence in all this long stretch, Cochin on the west and Madras on the east. The lesser ports carry a considerable trade, but loading and unloading must usually be done by lighter.

West Coast. The South India Railway runs along the west coast for 264 miles, between Mangalore and Cochin. The ports of Mangalore, Cannanore, Tellichery, Calicut, Beypore and Cochin are all linked to this broad gauge line which extends eastward to Trichinopoly and Madras.

Mangalore. Population 66,756. Imports (usual trade) in pre-war years: sugar, rice, salt, dates, grain, machinery, piece goods, petroleum, coir yarn, coconuts. Total tonnage of vessels entering port in 1938-39, 83,031 tons. Exports: rice, coffee, machine made tiles, hides, turmeric, spices, cashew nuts. Open roadstead in 4 to 5 fms. Vessels loaded and discharged by lighters. Channel through bar into Mangalore Backwater (lagoon) has about 12 ft. of water at high water ordinary neaps. About 3,000 ft. of quayage for lighters only. No communication with shore by any boat during S.W. monsoon, May 15 to September 15. Some coal available. One 1-ton crane, one 2-ton crane, one 5-ton crane.

Cannanore (Kannanur). Population 34,236. Imports: rice in large quantities, piece goods, salt, liquors, wines and spirits, oil-man's stores, dates, onions, dyes, grains, glass, ironware and tiles. Exports: pepper, sandalwood, coconuts, salt fish, fish guano, fish manure, fish oil, cotton piece goods, cigars. No docks or quays. Anchorage for steamers in $5\frac{1}{2}$ to 6 fms. about $2\frac{1}{2}$ miles offshore. Small

military station. Cargo boats and labor abundant. The port is practically closed during the monsoon from the middle of June to the end of August. Good water from wells on beach; fresh provisions and excellent fruit plentiful.

Tellichery. Population 30,349. Imports: manufactures, hardwood, etc. Exports: coffee, pepper, ginger, cardamons, arrow root, sandalwood, cinnamon. Total tonnage of vessels entering port in 1938-39, 10,962 tons. Open roadstead, anchorage in 5 fms. Good roads to Calicut, Cannanore, Wynad, Mysore, and Coorg. Labor good and abundant. Weather uncertain May to September. Good water and fresh provisions plentiful.

Calicut. Population 99,273. Imports: grain, piece goods, hardware, machinery, soap, kerosene, chemical manures, cotton twist, cement, sugar, rice, salt, motor cars and parts, metals and ores, tea chests and fittings, wheat, flour, seeds, umbrella fittings. Total tonnage of (157) vessels entering port in 1938-39, 147,874 tons. Exports: pepper, coir yarn, copra, timber, coconut oil, fish manure, ground nuts (peanuts), ginger, cardamons, tea, rubber, coffee, sandalwood, palmyra fibres, cashew nuts, soap, cotton, tiles, piece goods, banians (loose shirts), cotton waste. Two piers; depth at piers, 12 ft. L.W., 15 ft. H.W. At northern pier, five 1-ton, two 5-ton hand cranes, one 3-ton steam crane. At southern pier, five 1-ton, one 5-ton hand crane, one 3-ton steam crane. There is a large native coasting trade as well as considerable foreign trade. Boats, boatmen, and laborers are abundant. The port is practically closed from the beginning of June to the end of August.

Beipur (Beypore) is part of the port of Calicut, vessels anchor in 5 fms. about 1½ miles off shore. No coal. Fresh water and provisions obtainable.

Cochin. Population 100,000 (including adjoining towns). Imports: rice, piece goods, hardware, metals, chemicals, provisions, oilman's stores, flour, and bran. Exports: coir yarn, coir rope, tea, rubber, pepper, teak, rosewood, oilcake, ginger, mineral sand. Volume of trade, imports and exports, handled during 1941, 1,000,000 tons. Net registered tonnage of ships entering harbor in 1941, 1,700,000 tons. Harbor channel navigable at all seasons for vessels drawing up to 30 ft.

Inside the harbor there are ten fore and aft berths, one swinging berth, one passenger berth, and two wharf berths. Small steamers and sailing craft are moored with their own gear. Available storage facilities are one warehouse, two transit sheds, a combined goods shed, a warehouse with a low wharf for backwater (canal) trade. Boat wharf has one 5-ton and four 2-ton hand cranes. There is a dry dock 240 ft. long, 44 ft. wide, suitable for vessels of less than 14½ ft. draft; mainly used for docking craft belonging to Harbor Authority. A fitting out wharf, 300 ft. long 11 ft. deep, close to dry dock, is available, also port workshops. Four 2½ ton cranes and one 5-ton crane on the Customs Quay, and one 10-ton crane at the dry dock entrance. Bunker coal, diesel and fuel oil available.

Alleppey. Population 43,838. Imports: salt, grain, metals, piece goods, timber. Exports: coir mats, coir yarn and fibre, turmeric, copra, ginger, cardamons, poonac (fodder made from coconut), pepper, arrowroot, sandalwood. Trade can be carried on the year round at this port owing to an extensive mudbank offshore which is oil bearing and creates a large expanse of smooth water at the anchorage and in the vicinity of the pier. The anchorage is about 4 fms. soft mud bottom; pier 985 feet long with 15 feet of water at the end. Pier is part iron and part concrete, has three T heads and eight cargo stages. Two steam and two hand cranes lifting 2½ to 5 tons. Severe gales occur

in April, May, June, October, November, but vessels can always find shelter off the mudbank. Alleppey has no railroad connections, but good roads link it with the main highways of South India. A canal passes through Alleppey into the extensive system of backwaters (natural lagoons paralleling the coast) over which a great trade is carried. Fresh water from well on beach; fish good and plentiful, provisions abundant.

Quilon. Population 33,739. Imports: salt, coal, piece goods, etc. Exports: coconut oil, coir mats, timber, fish, etc. Open roadstead, anchorage in 5 to 7 fms. The metre gauge line of the South India Railway from Tinnevelly and Madras reaches the coast at this point. The railroad approaches to within a mile of the harbor, then continues south to Trivandrum. Quilon has continuous water communication by backwater and canal with Trivandrum to the south, and north to Alleppey and Cochin, thence to Shoranur. Food supplies of all kinds can be obtained; fish are especially cheap and plentiful, as is generally true along this coast. No coal. The port is virtually closed from May to September.

Trivandrum. Population, 72,000. Open roadstead with deep water close to shore. There is an iron pier 750 feet long with two steam hoists on it. Ships lie close to the pier in 12 fathoms. Trivandrum is the capital of Travancore.

East Coast

Tuticorin. Population 60,099. Imports: general. Exports: tea, general. Total tonnage of vessels (505) entering port 1938-39, 1,040,681 tons. The roadstead is quite open but is available at all seasons as the southwest monsoon blowsover the land, forming a lee which makes for smooth water. Large vessels anchor 4 to 5 miles from

shore in 5½ to 6 fms. Vessels load and discharge by means of large cargo boats varying from 40 to 150 tons capacity. Six piers; Concrete Pier, 480 feet, one 5-ton crane, two 1½-ton, two 1-ton; Iron Pier, 315 feet, three 1-ton cranes. Foreshore, one 2½-ton crane, one 1½ ton, one portable 2½-ton crane. Railway connections via metre gauge of South India Railway to Maniyachi, Madura, Madras. Stocks of fuel oil and coal maintained. Water obtainable but not good.

Negapatam. Population 54,000. Center of coolie (unskilled labor) emigration, total tonnage of vessels (170) entering port in 1938-39, 386,994 tons. Vessels anchor in 4 to 4½ fms. are loaded and discharge by lighters of 5 to 15 tons. One 1-ton crane, one 3-ton crane. Fish and fruit plentiful and cheap. Water good. Meter gauge of S.I. Ry. to Trichinopoly and Madras. In case of necessity only, coal in small quantity may be obtained from Railway Co.

Karikal. Population 17,038. A French possession. Anchorage in 6 to 7 fms., said to be the best open anchorage along this coast. Cargo handled by a well organized system of native boats. Metre gauge of S.I. Ry. to Madras. Only a small and inferior supply of boiler water obtainable. Coal is available in small quantity. Karikal is a storage and distribution point for petroleum.

Tranquebar. Population 15,000. Imports: timber. Exports: rafts and fishing nets. Anchorage one to one and a half miles from shore in 5½ to 6 fms. About 1 fm. at quays. Cargo handled by native "masula" boats, the common type of lighter along this coast made of planks bound together with coconut fibre. This town is considered one of the most healthful places in the district. Metre gauge of S.I. Ry. connects with Madras system.

Porto Novo. Anchorage 2 to 3 miles offshore in 6 to 9 fms. Connected with metre gauge of S.I. Ry.

Cuddalore. Population 59,057. Imports: grain, coal, palmyra, jaggery (crude sugar), teak, wood, timber, betel nuts, spices. Exports: sugar, spirits, peanuts, rice, piece goods, gingelly and margosa oil. Total tonnage of vessels (116) entering port in 1938-39, 191,681 tons. Anchorage in 6 fms. Cargo is handled by native boats, of 4 to 30 tons capacity, which can move a total of 1,000 to 1,600 tons per day. Fresh provisions available but expensive. Some coal (up to 3,000 tons) available. Fresh water supplied in casks.

Pondicherry. Population 43,500. A French possession. Imports: raw cotton, wines and spirits, perfumery, gold and silver thread, sugar, areca nuts, wrist watches, silk, saccarine, fountain pens, bullion. Exports: cotton cloth, peanuts, onions, bone meal, pottery. Anchorage in 6 to 8 fms., 3/4 mile from shore. An iron pier about 1,090 feet long has a railroad spur laid on it. The depth alongside permits only lighters to berth. About 110 4-ton lighters are available. Four electrical cranes, one 5-ton, others 1,500 kilos. N.E. monsoon often delays operations. Fresh provisions plentiful but expensive. No coal or fuel oil available. Metre gauge S.I. Ry. connected to Madras system.

Madras. Population 770,000. Imports: Coal, coke, oils, manure, rice, grain, timber, motor cars, railway materials, textiles, sugar, cement, chemicals, glassware, machinery, paper, chemicals, etc. Exports: peanuts, oilcake, raw cotton, ore, tobacco, vegetables, tanned hides, manure, scrap iron, piece goods, oil seeds. Volume of trade handled in 1941, 1,000,000 tons. Net tonnage of ships entering harbor, 1,600,000 tons.

Artificial harbor formed by two arms projecting from the low sandy coast. Area about 200 acres, depth 30 feet. Entrance 400 feet wide, 37 ft. depth at high water, 34 ft. at low water. Sixteen

vessels, drawing 26 to 31½ ft., can be accommodated at berths with moorings. Landing and shipping elsewhere than at these berths is by lighters, of which there are 64 of up to 50 tons, and 17 of 50 to 100 tons capacity.

There are 22 hydraulic cranes of 1-ton, and 4 of 2-ton capacity. West Quays berths Nos. III and IV have six 35 cwt. and one 5-ton high speed luffing hydraulic travelling crane with radius of 50 ft. for working cargo into and out of vessel's hatches.

West Quay berths Nos. I and II have four 3-ton and one 5-ton (60 ft. radius) high speed electric portal cranes.

South Quay has:

(a) One travelling Titan steam crane of 33 tons capacity (25 tons can be lifted direct from the steamer's hold by this crane, there being about 40 ft. clearance above I.S.L.W. to the eye bolt of the crane).

(b) One ten-ton electric travelling portal luffing jib crane of 90 ft. radius.

(c) One 5-ton electric travelling portal luffing jib crane of 90 ft. radius.

(d) One 5-ton electric portal crane, 50 ft. radius which may be used for discharging from lighters. All quay berths are provided with floodlights.

There is a slipway for repairing vessels up to 900 tons and 9 ft. draft. Two large quayed ponds with cranes, railways, etc. for the bar iron and timber trade.

Vessels lying alongside north and west quays can load oil fuel while handling cargo. Oil from tankers can be pumped ashore from five places, one of them can also be used for gasoline. Coal vessels can discharge about 1,700 tons per day directly into railway wagons.

Large passenger vessels habitually use the quays which have direct railroad connection. Three tugs (900; 800; 450 hp.) for berthing and assisting steamers. Madras is the focal point of the railroads and roads in the south of India. About 5,000 tons of Bengal coal is usually stocked. Normal stock of fuel oil, 6,000 tons, can be delivered through pipe lines. Diesel oil is delivered in barrels or drums.

A consular report of July 15, 1942 notes that lighterage is plentiful with 260 lighters of 50 to 60 tons capacity and a large number of water craft capable of handling light and mixed cargo. 1/

Masulipatam. Imports: textiles, gunnies, timber, machinery, and cement. Exports: rice, chilles, coriander, and gingelly seeds, pulse, peanuts, peanut oil cake, oil seeds. Anchorage 4 miles from shore. Cargo is handled by native sailing craft. Since the river bar must be crossed at high water, and the distance to the anchorage is great, these craft can generally make but one trip a day. About 23 lighters, capacity 20 to 60 tons, are available. One 3-ton hand crane. Total tonnage of vessels entering port in 1938-39, 174,563 tons. Connected with M.S.M. Ry. metre gauge line.

Coconada. Population 65,952. Imports: formerly petroleum and teak from Burma. Exports: rice, sesame, cotton, jaggery (raw sugar), oil seeds. Anchorage in sheltered roadstead 5½ to 6 miles off port. Wharf 107 ft. long, depth alongside H.W. 8½ ft., L.W. 3½ ft. Two half-ton cranes on the pier; one 10-ton travelling steam crane; one 5-ton hand crane. Dry dock 120 ft. long, 29 ft. broad. Connected with M.S.M. Ry. broad gauge line. No stock of coal is maintained, but a supply may be obtained at short notice. Fuel oil available for bunkering.

Vizagapatam. Population 57,303. Imports: chemicals, provisions, teak, and machinery. Exports: linseed, manganese ore, oil

cake, peanuts, hemp. Volume of trade handled in 1941, 500,000 tons. Net tonnage of ships entering harbor 900,000 tons. Land-locked harbor for vessels up 31 ft. draft. Three quayside berths, one jetty berth, four mooring berths. Depth at entrance 36 ft. Depth at quays, 32 ft. Quay berths 2 and 3 equipped with transit sheds and ry. line. Six 3-ton electric cranes, one 14-ton and one 40-ton steam crane. Three harbor tugs. Dry dock 350 ft. long, 60½ ft. wide. An efficient machine shop is maintained by the port. There is also a foundry. A large stock of coal is maintained.

Bimlipatam. Population 9,629. Imports: jute, tiles. Exports: seeds, jute, peanuts, myrobalams, oil cake, hemp. Open roadstead, anchorage in 5 to 5½ fms. No cranes.

Calingapatam. Open roadstead, anchorage in 5 to 5½ fms.

Gopalpur. Imports: provisions, grains, tobacco, coriander seeds, soap nuts, empty bottles, potatoes, matches, ginger coconut oil. Exports: rice, pigs, gingelly seed, dry leaves, horse grain, prawns, skins, chuva oil. Open roadstead, anchorage in 6 to 7 fms. ½ mile from shore. Vessels loaded and discharged by surf boats, capacity 1½ tons.

Puri. Open roadstead. Vessels loaded and discharged by masula boats, about 2 tons each.

37. Commercial Aviation.

Two scheduled routes are operated in the region, Bombay-Trivandrum-Trichinopoly, and part of the Colombo-Kararchi flight. Both are operated by Tata Air Lines.

Colombo-Karachi. Northbound planes of this route arrive in Madras from Colombo via Trichinopoly at 1:15 p.m. on Sunday, Tuesday, Wednesday, Saturday. They leave for Bombay via Hyderabad, at 1:45 p.m. the same day. Southbound planes arrive from Bombay-Hyderabad at 9:20 a.m. on Sunday, Wednesday, Thursday, and Saturday. They leave at 10:00 a.m. the same day.

. Bombay-Trivandrum-Trichinopoly. Once weekly in each direction. Operated November to April only.

A fully equipped aircraft repair depot has recently been established at Bangalore. A consular report dated October 31, 1941,* says that this factory possesses one of the best machine shops in India. The original buildings, completed July 1941, have been expanded to include a total of 252,000 square feet of floor space (see paragraph 32). Facilities for the assembly of planes are adequate but engine manufacture is not contemplated. Equipment includes pattern shop, electric and oxy-acetaline welding, power operated drop hammers, aluminum-alloy stamping, high frequency electric induction furnace.

The personnel included 22 American supervisors and department heads, many more have arrived since the date of the report. 4,000 persons were employed, their abilities being rated high. The report of the Grady mission which visited the plant in April 1942 corroborates the efficiency of the labor force.

The landing field has two runways, one 5400 ft. in length, the other 6500 ft. One is "metalled," the other is concrete. An artificial lake has been constructed to accommodate seaplanes.

*Madras, Consular Report, Progress of Hindustan Aircraft Factory, Nicholas Feld, October 31, 1941.

Air Fields

The following are the principal aerodromes and landing fields of the region as given in published sources. New fields have been opened recently, more complete information may be obtained from A-2.

Abbreviations.

W/T - Wireless Telegraph
WI - Wind Indication
PW - Prevailing Wind
R - Rains or rainy season

"Obstructions" indicate those requiring special caution. Notations of feet are elevations above field.

There are no lighting facilities at any of the fields noted below.

Athgarh (Orissa States). 20°31' N., 85°33' E. Altitude 150 ft. Sheet 73 H/10 of 1" map. Landing Area. N-S 600 yards; E-W 370; NE-SW 725; NW-SE 700. Rough grass, slope negligible. Obstructions. N-Hospital, 20'; E-Kiln; W-Houses 20'; Surrounding country, paddy fields. Signals and Markings. Circle and corner flats. WI in NE corner of landing ground. Facilities. Fuel, repairs, 1 private hangar. R.R. Station 9 miles. Cars available. Hospital adjoining grounds. Meteorology. PW-SW; R-June-October. Storms-February-April.

Bangalore. 12°58' N., 77°38' E. Repairs. 475 x 425 yards. Altitude 2,940 ft. 2 miles SE of Bangalore Cantonment. R.A.F.

Baripada. 21°56' N., 86°49' E., Altitude 260 ft. Sheet 73 K/13 of 1" map. Mayurbhanj State, controlling authority. Landing Area. N-S 830 yds; E-W, 970. Runways. N-S 830 x 250; E-W 715 x 250. Surface slightly sandy, grass cover. Slope slight down from center to N. and S. Obstructions. N. isolated trees; S-trees 50'; E-trees 65'; W-trees 54' Signals and Markings. Standard corner, boundary and circle. WI in NW and SW. Facilities. Fuel, Repairs, 1 hangar. R.R. station 6 miles, road to Baripada in N. edge. Baripada hospital 6 miles. Meteorology. PW-Southerly; R-June to October. Storms February, March, April.

Bellary. 15°09' N., 76°57' E. Repairs. 580 x 225 yards. Altitude 1,523 ft. 1 mile N.W. of Bellary Cantonment. R.A.F.

Cannanore. (Army, Non.-Permanent). N. 11°51'-E. 75°22'. 110 x 330 yards. Altitude, 25 ft. In SE corner of military area in Cannanore.

Cochin Harbor (New Vypeen). N. 9°58' E. 76°17'. Altitude 5 ft. Sheet 58 C/5 of 1" map. Controlling authority. Administration offices, Cochin Harbor House. Landing Area. 300 x 300 yards. Surface. Sand, clay, shells. North part rough. Obstructions. None. Signals and Markings. Boundary marks and circle. WI in

SW corner. Facilities. British Cochin and Ernakulam may be reached by water only. Meteorology. PW. WNW; R-SW Monsoon, May and September. NE monsoon October and November.

Cuddapah. 41°31' N.; 78°47' E. Altitude 430 ft. Sheet 57 J/14 of 1" map. Landing Area. N-S.680 yards; NE-SW 900, E-W 860, NW-SE 1,050. Surface, Sandy loam,quick draining, slopes negligible. Obstructions. None. Signals and Markings. Standard landing ground markings. Facilities. Fuel, repairs, water. R.R. station 1 and 6½ miles. Road adjacent. Government hospital at Cuddapah 6 miles. Meteorology. PW-NW and SE; R-August, September, October; Dust storms-May and June.

Donakonda (Madras). 15°50' N., 79°29' E. Altitude 470 ft. Sheet 57 H/5 of 1" map. Landing Area. N-S 825 yards; E-W 825; NE-SW 1,000; NW-SE 950. Surface, hard gravel, slope negligible Obstructions. N-trees, 30', S-trees 50', NW-trees 40'. 3 ft. wall surrounds field. Signals and Markings. Boundary, cover marks and circle. WI on north side. Facilities. Fuel, repairs, water. R.R. ½ mile, railway dispensary near station. Meteorology. PW-E to NE, September-January; W. to SW. February to August. Dust storms-May and June; Mists in morning December and January. R-light, April-July, November-December. Heavy, September-October.

Madras. N. 13°00'. E. 80°11'. Altitude 40 ft. Sheets 66 C/4 and D/1 of 1" map. Landing Area. N-S. 900 yards; NE-SW 900; E-W, 800; NW-SE, 600. Grass surface slope SE to NW (negligible Obstructions. NE-St. Thomas Mt. 210' 3/4 mile; 2 W/T masts 150' 3 miles; 1 mast 130', 7½ miles; 2 unlighted masts 264', 9½ miles. SE-2 masts 150' (lighted) adjacent wires, trees; SW-hills 450' 1¼ miles (marked) W-trees 50' high, adjacent. Signals and Markings. Official Indian Aircraft Rules 1937. Facilities. Fuel, repairs, 2 hangars one small, other 100 x 100 x 25. R.R. 7 miles, taxis, hospital, 7 miles. Ambulance Meteorology. PW-Westerly, NW R-June-September, December-February; Dust storms, May-July.

Madras. 13°04' N., 80°17' E. Altitude 20 ft. 528 x 425 yards. ½ mile W. of St.Thomas Mount.

Quilon (Travancore State). 8°54' N., 76°36' E. Altitude 30 ft. sheet 58 D/9 of 1" map. Landing Area. N-S. 370 yards; NE-SW 330; E-W 380; NW-SE 460. Surface, level gravel. Obstructions N-trees, 40'; S-trees and buildings up to 40'. W-trees and electric wires up to 50'. Signals and Markings. Corner boundary marks and circle. WI in NW side outside field. Facilities. Fuel, repairs, water. R.R. station 1 mile. Road adjacent. Bus, lorry. State Hospital 1 mile. Meteorology PW-WNW. E. December to February. E-mid April to November.

Trichinopoly (Madras). N 10°46'. E- 78°43'. Altitude 290 ft. sheet 58 J/9 of 1" map. Landing Area. N-S., 825 yards; NE-SW. 775; E-W 750; NW-SE 1,000. Surface, grass and gravel; slope negligible. Obstructions. S-wires, 60'; W-wires 21'; SW and NW-trees, 30'. Signals and Markings. White boundary marks and circle. WI on E. side. Facilities. Fuel, repairs, water. R.R. station 2½ miles. Road adjoining field. First aid at Railway Hospital 2½ miles. Government Hospital 4 miles.

Meteorology. P[illegible] N. to NE, January-March; SW to W. April to October; N-November and December. R-July to November; low clouds August and September.

Trivandrum (Travancore State). 8°29' NE 76°55' E. Altitude 15 ft. sheet 58 D/15 of 1" map. Landing Area. L-shaped, each area is 650 : 200 yards. Surface, level gravel. Obstructions. NW chimney 60'; N and NE trees, 60', SW trees, 30'. Facilities. Fuel, repair; water, 1 hangar 50 x 60 ft. R.R. station, 1 mile Road nearby. Taxis. First aid at State Hospital 2 miles. Meteorology. NE, summer; SW, winter; R-mid April to mid November.

38. Commerce.

The foreign commerce of the Madras-Mysore-Orissa area is vitally important to the well-being and prosperity of the inhabitants. But is is also extremely difficult to describe. A large part of the imports and exports of Madras--perhaps 50 percent of the imports--is usually handled through the ports of Bombay and Calcutta. For this part of Madras's commerce, no satisfactory data is available. Mysore has no coast or ports; its trade moves mainly, but not entirely, through the ports of the province of Madras. The foreign commerce of Orissa is so small that it need not be considered. The data and observations which follow, therefore, relate immediately to the sea-borne trade handled through the ports of the province of Madras--i.e., Madras, Cochin, Tuticorin, etc.--though the general conclusions apply to the entire area.

Before the present war Madras exported chiefly to the United Kingdom, Ceylon, Burma, and the continental nations of western Europe. Total value of exports in the fiscal year 1938-39 was Rs. 356,800,000 ($107,040,000). The largest single item was groundnuts (peanuts), which were sent to France, the Netherlands, the United Kingdom, and Belgium. Leather and tea, Madras's second and third largest exports, went chiefly to the United Kingdom.

Madras's pre-war imports came chiefly from Burma, the United Kingdom, Germany, Japan, and the United States. Total value of imports in 1938-39 was Rs. 246,100,000 ($73,830,000). Rice from Burma, to the extent of more than 600,000 tons annually, was Madras's chief import, followed by imports from the United Kingdom of machinery, mill-work, and iron and steel. Madras's third largest import was kerosene and gasoline, chiefly from Burma and Iran.

This pre-war pattern of commerce has been disrupted in the

course of the war. Groundnuts, the chief export, can no longer be sent to the European market and substitute markets have not been found. A fund has had to be established to compensate producers who have reduced their acreage. Exports of leather and tea have stood up well, since the United Kingdom continues to import large quantities, but they have not been able to relieve the depressing effect of the collapse of the goundnuts market.

Madras's imports, which are even more essential to the welfare of the province than her exports, have been thoroughly disrupted. Rice from Burma, the chief import, has been completely cut off since the Japanese conquest of Burma, and the likelihood of a food shortage is very great. Imports of manufactured articles and iron and steel from the United Kingdom have fallen off because of Britain's own war needs. Imports of kerosene and gasoline from Burma have also ceased.

To top it off, the trade of Madras has been crippled by two additional factors: (1) the shipping shortage--as the war developed the number of vessels available for ordinary commerce decreased, and even before Japan attacked in December 1941 the shortage of ships was becoming quite severe; (2) the closing of the east coast ports--by the middle of April 1942 the Japanese gained naval control of the Bay of Bengal and their raids on shipping forced the almost complete shutdown of all the east coast ports of India. By the end of July 1942, a small number of vessels was again entering these ports.

Recent statistics show that of all the ports of Madras province, only Cochin has been active. It may safely be asserted that the commerce of Madras in the last few months has been almost completely crippled, and the economic position of the whole of South India will deteriorate rapidly if present conditions persist much longer.

American Trade with Madras Province. American trade with

Madras has doubled since the outbreak of war in 1939, but it still forms only a small part of the total trade. Chief exports from the United States to the Madras ports in 1940 were manufactured items like chemicals, paper products, iron and steel goods, and motor vehicles. Our chief imports from Madras in 1940 were cashew nut kernels, manganese ore, hides and skins, rubber, and leather. The United States also imported some mica from Madras. The total value of American imports from and exports to the Madras ports in 1940--$10,520,000--shows clearly that the United States played only a minor part in the trade of the area.

Statistical Tables. Four small tables of figures are given below. They show (1) the total value of the imports and exports of the Madras ports in 1938-39, divided according to countries; (2) the same figures divided according to types of articles imported and exported; (3) exports to the United States in 1940; (4) imports from the United States in 1940:

1. Exports and Imports of Madras Province.

Countries	Imports 1938-39	Exports 1938-39	Percentage of Total Trade 1938-39
	Rs. Lakhs.	Rs. Lakhs.	
BRITISH EMPIRE--			
United Kingdom	655.92	1440.25	34.77
Ceylon	30.92	367.65	6.61
Straits Settlements	53.83	73.48	2.09
Union of South Africa	27.78	11.24	0.56
Commonwealth of Australia	7.80	21.56	0.48
Canada	11.57	9.25	0.35
Federated Malay States	0.44	24.48	0.42
Burma	924.39	252.61	19.53
Other British Possessions	27.74	52.02	1.33
Total British Empire	1735.39	2252.54	66.14
FOREIGN COUNTRIES--			
Europe--			
France	10.80	227.20	3.95
Germany	184.00	182.74	6.09
Netherlands	23.93	201.18	3.72
Italy	9.14	57.42	1.11
Belgium	46.01	168.89	3.57
Other Countries	80.32	140.27	3.65
Total Europe	354.20	977.70	22.09
Asia--			
Japan	123.85	71.41	3.24
Java	5.81	2.10	0.13
China	17.32	16.58	0.57
Iran	62.09	0.15	1.03
Other Countries	29.74	14.48	0.73
Total Asia	238.81	104.72	5.70
America	101.75	172.60	4.54
Africa	31.28	60.54	1.53
Total Foreign Countries	726.04	1315.56	33.86
Grand Total	2461.43 ($73,800,000)	3568.10 ($107,000,000)	100.00

2. Foreign Trade of Madras Ports by Commodities.

Classes	1938-39
	Rs. Lakhs
IMPORTS--	
I. Food, drink and tobacco	761.87
II. Raw materials and produce and articles mainly unmanufactured	532.47
III. Articles wholly or mainly manufactured	1149.15
IV. Living animals	0.56
V. Postal articles	17.38
Total Imports	2461.43
EXPORTS--	
I. Food, drink and tobacco	952.86
II. Raw materials and produce and articles mainly unmanufactured	1607.47
III. Articles wholly or mainly manufactured	948.54
IV. Living animals	6.54
V. Postal articles	52.68
Total Exports	3568.09
Total Foreign Trade	6029.52 ($180,800,000)

3. Exports from Madras Ports to United States: 1940
(value in Rupees)

Article	1940
Cashew Nut Kernels	7,655,229
Cashew Nut Oil	463,370
Coir Mats and Matting	832,672
Coir Yarns	264,737
Hides and Skin	3,763,086
Ilmenite Sand	--
Leather	1,861,997
Manganese Ore	5,904,547
Palmyra Fibre	319,714
Rubber	2,057,555
Tobacco	487,010
Wool Carpets and Rugs	436,841
Total	24,046,758 ($ 7,200,000)

4. Imports into Madras Ports from United States: 1940
(value in Rupees)

Article	1940
Asphalt	396,206
Chemicals	1,719,585
Instruments (but not radios)	333,214
Machinery and Millwork	1,129,912
Manures (chemical)	571,793
Metals	1,504,799
Oils	1,456,196
Paper Products	1,630,240
Rubber Products	396,079
Unmanufactured Tobacco	1,132,596
Vehicles (automobiles, etc.)	1,166,719
	11,427,339 ($ 3,320,000)

39. Communications.

The communication system of South India links with the nation-wide setup and has been described in two previous surveys, the Strategic Survey of India and the Survey of Northeastern India. The text there should be consulted for the Madras-Mysore-Orissa area.

The states of Travancore and Cochin have their own postal services for internal use only. The state postal organization, called "Anchal," issues its own stamps, covers, and cards at a cost about half that of the British Indian postal system. Travancore and Cochin have an agreement whereby letters and money orders using the stamps of one state are honored in the other state. The Travancore Anchal office has a savings bank section which held a balance of Rs. 8,956,000 in 1937-38. In addition to the Anchal offices there are also the regular Imperial postal services in both states.

Both telegraph and postal routes reach every section of the area.

40. Finance.

Monetary units are the same as for India generally, with the exception of Travancore which mints certain coins of its own. These are the silver fanam (2.25 annas), the copper chackram (6.74 pies) and the cash (0.42 pie--supposedly the coin of smallest denomination minted anywhere in the world). There is also a copper half chackram, a copper quarter chackram, the half rupee called "chitra" (14 chackrams) and a silver quarter rupee (7 chackrams). The British Indian silver and nickel coins and currency notes are also in free circulation within Travancore.

Mysore and Travancore rank second and third among Indian states in size of budget. Only Hyderabad exceeds them. The budget of Travancore for 1939-40 estimated revenue at Rs.26,379,000 and expenditure at Rs.26,109,000, leaving a surplus of Rs.270,000. The budget estimates for the province of Madras, 1940-41, estimated a total revenue of Rs.167,611,900 and an expenditure of 167,529,700, leaving a surplus of Rs.82,200.

The Orissa budget for 1940-41 showed a deficit of Rs.467,000. The total revenue was estimated at Rs.19,521,000 and the expenditure charged to revenue at Rs.19,988,000.

Mysore State revenue (1938-39) was Rs.38,828,000; total expenditures amounted to Rs.40,467,000.

The Orissa budget estimates for 1942-43 provide for revenue receipts of Rs.19,707,000 and expenditures of Rs.19,695,000. Some of the major items of expenditure are:

	Rs.
Land Revenue	64,000
General Administration	3,018,000
Jails and Convict Settlements	358,000
Police	2,352,000
Education	2,700,000
Medical	1,033,000
Public Health	275,000
Agriculture	308,000
Industries	361,000
Civil Works	2,163,000

Madras Province Budget

1940-41

Revenue	Rupees		Expenditures	Rupees	
Income Taxes	4,000,000		Land Revenue	2,399,300	
Land Revenue	49,882,500		Provincial Excise	2,959,200	
Provincial Excise	32,145,900		Stamps	475,600	
Stamps	17,307,600		Forest	3,728,300	
Forest	4,508,100		Registration	2,919,600	
Registration	3,313,800		Charges on account of Motor Vehicle tax	7,446,100	
Motor Vehicle Tax	8,264,900		Other Taxes and Duties	1,578,700	
Other Taxes and Duties	8,746,000				
Total Chief Heads of Revenue		128,168,800	Total		21,506,800
Irrigation, Navigation, Embankment and Drainage Works		19,381,400	Irrigation, Navigation, Embankment and Drainage Works		12,667,200
Debt Services (Interest)		2,269,200	Debt Services (subtracted)		- 3,522,900
Civil Administration (Education, Medical, Industries, Agriculture, Veterinary, Jails, Justice, Police Cooperation)		8,504,400	Civil Administration (Education, Medical, Industries, Agriculture, Veterinary, Jails, Justice, Police Cooperation)		106,128,400
Civil Works		3,456,500	Civil Works		12,846,400
Electricity Schemes		3,581,300	Electricity Schemes		2,639,200
Miscellaneous		2,220,300	Miscellaneous (Famine, Superannuation, Stationery, Printing)		15,264,600
Contribution of Central Gov't.		30,000			
			Total Expenditure		167,529,700
			Surplus		82,200
Total Revenue	Rs.	167,611,900	Total	Rs.	167,611,900

Supplement A*

MYSORE 1/

Mysore is strategically important for several reasons. It is one of the largest of the Indian states; it is more industrialized than most, having the only airplane factory in India; and it includes a large military station. The city of Mysore is the capital, but Bangalore is the administrative headquarters.

The state occupies the southernmost (and highest) part of the Deccan, the central tableland of India. It has two natural divisions, each with a distinct character of its own--the hill country (malnad) on the west and the wide-spreading valleys and plains (maidan) to the east. The malnad is full of steep hills and deep valleys, covered with thick evergreen forest. Rainfall is heavy; the population is sparse because of malaria. Coffee is the chief crop of this part of the state. The maidan is gently undulating country encompassing two river systems, that of the Krishna and the Cauvery (Kaveri) which are separated by a central ridge some 3,000 feet high.

Principal Statistics: Area, 29,329 square miles, of which 4,630 are forest; general elevation along northern and southern frontiers, 2,000 ft.; population (1941), 7,329,000; average density of population, 250 per square mile, as compared with 347 for Madras and 961 for Cochin.

Mysore is quite homogeneous both as to language and religions. Over 90 percent of the population is Hindu. About 70 percent of the people speak Kannada (Kanarese).

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*Mysore is sufficiently important to seem entitled to a short separate treatment, though at the risk of repeating a few items of information contained in the main body of the present Survey.

History. Two Moslem rulers extended the boundaries of the state to their greatest scope. From 1750 to 1799 Haidar (or Hyder) Ali, a usurper who dispossessed the Wadiyar (or Wodiyar) family, and then his son Tippu Sultan enlarged and consolidated the size and power of Mysore. They scored brilliant victories over the English, but Tippu Sultan was finally defeated at Seringapatam. The British took over the state, but later set up the adopted son of an old Hindu ruling family as Maharaja. After some internal difficulties, the state was finally restored to the dynasty in 1881. Under the rule of Sri Chamarajendra Wadiyar Bahadur (1881-1894) the state flourished, and the second Maharaja (1894-1940) was equally wise or fortunate in choosing Dewans (prime ministers) who were able administrators.

The present ruler, Maharaja Sri Jayachamaraja Wadiyar, was born July 18, 1919. Educated first in a special royal school with an English tutor, he entered the University of Mysore and received the B.A. degree. He travelled in Japan in 1937, and visited Europe in 1939. His marriage took place in 1938. His capabilities cannot yet be judged. The annual privy purse (Rs. 2,300,000 in 1938-39) is about 6½ percent of the total revenue of the state.

Administration. The Maharaja is the source of all authority, executive, legislative, judicial. The Maharaja must give his assent to all measures passed by the legislature and may also make laws independently of the legislature.

The state is really run by the Dewan who presides over the Council of Ministers. The four ministers are appointed by the Maharaja, two of them from the elected members of the legislature, and, if possible, one from each house. The Council of Ministers are responsible only to the Maharaja, and the Dewan has autocratic authority over them.

The legislature consists of the lower house, called the Representative Assembly, and the upper house, the Legislative Council. The Representative Assembly has 310 members, 300 elected, 10 appointed. Members from communal minorities are elected by separate electorates. The Moslems hold 30 seats, Depressed Classes 30, Indian Christians 5, Anglo-Indians and Europeans have one seat each. Special interests, such as planting, commerce, industries, women, labor, university, are also represented. Eleven seats are reserved for women. There is an elaborate machinery defining the powers of the assembly, but actually it comes to the fact that the decisions of the Assembly, if passed by a large enough majority, are often followed by the administration. But the Dewan, acting in the name of the Maharaja, really has final say in all government matters.

The Legislative Council is composed of 68 members, and though they have special functions, the Dewan exercises effective control. The legislatures may not discuss such subjects as the ruling family, the relation of the state to the Paramount Power (England) and to foreign states, and other subjects reserved by the Maharaja.

The judiciary is established on the same lines as in British India. The High Court at Bangalore has three judges. For general administration, the state is divided into eight districts, each headed by a Deputy Commissioner, who is also District Magistrate. Each district has a number of subdivisions (taluqs) in the charge of a minor official (amildar).

Army and Police. The total strength of the Mysore Army in 1938 was 1,772. The state troops consisted of two cavalry units, the Mysore Lancers (stationed at Bangalore), the Mysore Horse (stationed at Mysore), three battalions of infantry and a mechanical transport corps.

The Bangalore Military station is an area of 13½ square miles which is British territory and one of the large military posts of South India.

The police force (1938-39) had a strength of 1,064 officers and 5,632 men. The organization of the force follows the pattern of British India.

Education. Literacy is close to the average for India. About 12 out of a hundred can read and write. The primary schools are taught in the vernacular; in high schools and colleges the medium of instruction is English. About 2 percent of the population is literate in English. The University of Mysore is an institution of good scholastic reputation. Its income for 1938-39 was Rs. 1,520,377, of which a government grant amounted to Rs. 1,472,380. Thirteen colleges throughout the state are affiliated with the University.

Agriculture. About three-fourths of the population is engaged in agriculture. The ryotwari system of land tenure prevails, the farmer has his freehold directly from the state. The major crops are:

Ragi (a cereal grass). The staple food of the poor. 2,204,802 acres in 1937-38.

Rice. 743,000 acres; 215,000 long tons. Large quantities must be imported; rice imports in 1938-39 were valued at Rs. 6,800,000.

Wheat. 3,000 acres; 1,000 long tons.

Peanuts. 220,000 acres; 48,000 long tons.

Castorseed. 102,000 acres; 94,300 long tons.

Cotton. 84,000 acres; 11,000 bales.

Sugarcane. 49,000 acres; 64,000 long tons.

Tobacco. 25,000 acres.

Coffee. Mysore is the principal coffee growing area of India. 110,000 acres. Plantations largely British-owned.

Industries and Commerce. Industry is more highly developed in Mysore than in any other Indian (native) State. Although Mysore's factories are inconsequential in comparison with those of the west, they are large for India. An outstanding feature of Mysore's industrialization is the government ownership and management of some of the most successful industries. The state has factories for the manufacture of soap, porcelain, silk, sandalwood oil, electric supplies, and also operates the Bhadravati iron and steel works. State-aided joint stock companies have been established and are in operation for the manufacture of sugar, paper, chemicals and fertilizer, spun silk, tobacco, and coffee curing, electric batteries, glass-making, and vegetable oils. There are now twenty-four industrial establishments owned or aided by the state. The total number of industrial establishments in October 1940 was 332, employing 65,000 workers. The Mysore district had 89 of these, employing 13,000 workers; 16 were in the Bangalore district, employing 18,000 persons. About 24,000 work in the Kolar Gold fields. The Bhadravati Iron and Steel works employ 3,500 men.

Mysore is the chief silk-producing center in India and accounts for over half the raw silk produced in the country. Directly or indirectly the silk industry offers employment to almost 200,000 families, or one-sixth the population. Mysore silk finds its market within India.

The principal exports to foreign countries are oilseeds and vegetable oils, coffee, sandalwood oil, woolen druggets, hides and skins, and sugar. Chief items of import are rice, gasoline and kerosene, machinery.

Finance. The Bank of Mysore Limited, a joint stock concern which acts as banker to the government of Mysore, has 20 branches in the state. Other major banks maintain branch offices at Bangalore.

The total state revenue for 1938-39 was Rs. 39,828,000, collected from these sources:

Land revenue	29.15 percent
Income tax, stamps and miscellaneous taxes	16.79
Excise revenue	12.22
Hydro-electric and irrigation works	12.00
Forest revenue	6.59
Railways	6.35
Mining revenue	5,88
Interest	4.95
Miscellaneous	4.34
Industrial works	1.73

The total expenditures for 1938-39 amounted to Rs. 40,467,000, charged to the following accounts:

Interest and sinking fund	19.07 percent
Moral and Material Development	16.93
Protection	13.14
Civil Administration	12.75
Direct Demands on Revenue	12.13
Public Works	8.11
Palace (Civil List of Ruler)	6.46
Tribute to British Government	4.72
Army	3.87
Local Self-Government	2.31
Charges against mining revenue	0.51

A large part of the excise revenue is derived from the government monopolies on the sale of country spirits (native liquor), toddy (a beer made from the coconut sap), opium and ganja (a narcotic).

Communication. The railway system is state owned, and has 748 miles of track. Roads are good, according to Indian standards. The state maintained 2,226 miles of road (1938-39), of which 2,001 miles are paved. On December 31, 1939 there were 2,510 cars in the state, 525 buses, 356 lorries and 474 motorcycles.

The construction of a radio station at Mysore has been authorized but the station is not yet in service. There is telephone service at Bangalore, Mysore, and Kolar Gold fields. The system is linked with the All-India trunk (long distance) lines.

Political. Although Mysore is popularly known as an extremely progressive state, it is an absolute autocracy in form of government. The unlimited powers of the Maharaja are decorated with some democratic frills and mitigated by the fact that the recent rulers have been, on the whole, adequate sovereigns. None the less, there has been a good deal of discontent which began to be expressed through the Mysore State Congress, an organization similar to the Indian National Congress. This group started a movement for more representative government in 1938, and its leaders were promptly thrown into jail. The Congress was declared illegal; there was military intervention at political gatherings with shooting and casualties.

The whole state was in a ferment when Mahatma Gandhi intervened as a negotiator with Sir Mirza Ismail, the Dewan. As a result of this, the ban on meetings of the State Congress was lifted and the organization was recognized as a lawful political party. The State Congress suspended civil disobedience. Many political prisoners were released.

In November 1939, the government of Mysore, through a proclamation of the Maharaja, announced the introduction of constitutional reforms. It provided for a widened franchise, more power for the legislatures, but there was no real transfer of power to the people and the government retained the essential characteristics of absolute rule. This new constitution has not yet come into operation.

Supplement B*

TRAVANCORE

Travancore is one of the more progressive Indian states. The land is rich, the climate favorable, the Maharaja's administration is a more-or-less benevolent autocracy. Literacy is higher in Malabar than in any other part of India, education is relatively widespread. Good communications by backwater and canal enhance the abundance of the land, though the pressure of population (among other factors) keeps the general standard of living low. Travancore has aptly been called the garden of India, a lush, tropical region which shares the distinctive economy and culture of the Malabar Coast.

Isolated from the rest of India by the Western Ghats, Travancore was rarely molested by the upheavals that affected other sections of the country. The terrain may be compared to three steps leading down to the sea. The highest level is the mountain range, covered with valuable timberland, dotted with tea and cardamon plantations, famous for the big game of its forests. The middle level, the foothill country, produces rubber, ginger, pepper, and turmeric. The bottom step, the coastal plain, bears thick groves of coconut palms and fruitful fields of rice.

Principal statistics: area, 7,625 square miles, about the same as that of New Jersey. Population (1941) 6,070,000, half as many again as New Jersey. Extreme length north to south, 174 miles, extreme width 75 miles. Density of population per square mile, 796. Rains during the monsoon season--June, July, part of August--are torrential

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* Travancore is sufficiently important to seem entitled to a short separate treatment, though at the risk of repeating a few items of information contained in the main body of the present survey.

and incessant. The sea level temperature varies between 75° and 90°; seldom does the temperature rise to 100° during the hot season. There is greater variation of temperature at higher levels. Malayalam is spoken by 84 percent of the population, Tamil by 15 percent, chiefly in the south of the state. The percentage of population by religion is: Hindu 61 percent, Christian 31 percent, Moslem 7 percent, Tribal and others 1 percent. Travancore and other Malabar areas have the highest proportion of Christians in India.

History. Prior to the time of Martanda Varma, who died in 1758, Travancore was divided into a number of petty principalities. It was with these that the Portuguese, the Dutch, the Danes, and the English first had relations. The English first settled at Anjengo, which they obtained on a grant from the Queen of Attingal in 1684. Martanda Varma, son of the Queen, conquered the other Rajas with the aid of a Flemish captain. This soldier, De Lannoy, had been captured during a battle with the Dutch, was befriended by the Raja and raised to the rank of military commander.

In the wars which the East India Company carried on in South India during the eighteenth century, Travancore gave military assistance to the Company. Travancore was considered one of the staunchest allies of the English, and in a treaty of 1795 the Company agreed to protect the state from all foreign enemies. In 1805 a new treaty was signed and the annual payment to the British was fixed at Rs. 800,000. This treaty is still in force.

Government. The present Maharaja of Travancore is Bala Rava Varma, whose full name includes thirty-four more words to affirm his exalted position. He was born November 7, 1912. The previous Maharaja died in 1924 and the British government recognized the succession of the present ruler who was then a minor.

Succession to the throne in Travancore and Cochin is through the female line. The son of a Maharaja becomes just another nobleman, the eldest son of the Maharaja's sister is the legal heir. While the present Maharaja was a minor, his aunt (who has no sons of her own) was regent. She is called the Senior Maharani and reigned until 1931 when the young Maharaja was invested with ruling powers by the British government.

As soon as the young Maharaja came to power, his mother, the Junior Maharani, saw to it that the Senior Maharani went into retirement.

For a while the Maharaja was very much under the influence of his mother. She had a hand in choosing Sir C.P. Ramaswami Iyer as Dewan (Prime Minister) and her ideas guided affairs of state. Of recent years the Maharaja has become somewhat less dependent on his mother, and the Dewan has come to be more and more powerful. Ramaswami Iyer is an astute politician and a capable administrator, who fought in the ranks of the Congress party in former years. He made his reputation as a lawyer in Madras and since he assumed office in Travancore in 1936 his reputation has grown throughout the country. He is now looked upon as one of the spokesmen for the princes of India. In Travancore he is boss. He was appointed to the Viceroy's Council in July 1942 as Minister of Information and Radio.

Sir C.P. Ramaswami Iyer has carried forward the trend toward greater independence of the state from the British resident. The Resident for the Madras states looks after Travancore, Cochin, and several smaller places. As representative of the Government of India he has ultimate powers over everything within the states under his charge. The Resident has been a sort of aloof supervisor who allowed the Raja and his counsellors to carry on government so long as they

followed the straight and narrow path laid down by the British. As soon as they deviated from that path, the Resident gently but firmly reminded them that they could continue to be sovereign princes only so long as they were good boys.

The following passage from a 1940 report by a U.S. Consul in South India describes the recent shift of state administration. 1/

"A change in policy, chiefly due to the expected coming into power of the Indian National Congress, became visible in recent years. In order to use the princes as a bulwark against the Congress, particularly with the introduction of the proposed Federation as envisaged by the Government of India Act of 1935, and thus to preserve British imperialism in India as far as possible, the old policy of the Curzon regime of maximum interference in the States was considerably relaxed. Consequently the Resident's position now is little of the 'watch dog' and much more of the friend, guide, and counsellor as regards many details. However, the finger is still firm and unerring in important matters. As a result of the recent change of policy on the part of the British government, the rulers of the Indian States are asserting themselves more and more. While no one dares to dispute the supremacy of the British Crown, the rulers are coming into the open as regards their legal position in the event of the British Crown withdrawing from India."

Sir C.P. Ramaswami Iyer has said that if Britain withdraws, the states will resume the position they occupied in India before the treaties with the East India Company were made. Nationalist leaders assert that the states are feudal anachronisms and must be liquidated.

At the present juncture, Travancore is more independent of the Resident than at any time within the last century, and, as one of the more advanced states with an astute Dewan, it wields considerable influence among the native states.

Principal Communities. The caste system is very rigid in Travancore. The Brahmans of Malabar, called Nambudiris, are not numerous but they own a good deal of the land and hold many offices. Also prominent in official posts are the Tamil Brahmans, who have come into Malabar in relatively recent times.

The Nayars are the old warrior caste and rank just below the Brahmans. They too occupy many public offices. One of the lower castes, the Ezhavas (also spelled Ilava or Iruva) have recently been clamoring for political recognition. They are toddy tappers by caste calling, i.e. they tap the palms for the sap called toddy, which is fermented and drunk as an alcoholic beverage. Many of them are now cultivators. Their strength lies in organization, and their organization has won them marked gains. Some years ago their leaders dickered with one of the Christian missions for a mass conversion. Some thirty thousand castemen were ready to become Christians if certain perquisites were made available. Their terms could evidently not be met and the mass conversion did not occur.

Travancore contains about a quarter of all the Christians in India. Over a million are Syrian Christians, members of a very old native church, which has maintained its theology and liturgy much as it was long before Europeans entered India. The popular tradition is that St. Thomas established the church in India in the first century. Be that as it may, the Syrian church in India dates from the earliest centuries of the Christian era. To this day the services are held in Syriac, the language spoken in Palestine at the time of Christ. There are many sects and denominations among the Syrian Christians; one owes allegiance to the Patriarch of Antioch, another has its own Metropolitan, two others are affiliated with the Roman Catholic Church, one branch is Protestant.

The Syrian Christian community is generally ambitious and enterprising. Their numbers have increased even faster than those of other communities. They are strong for education.

Muslims are found chiefly in the towns. Most of them are merchants.

Education. In 1937-38 the state spent Rs. 4.8 millions, about 20 percent of its revenue, on education. In that year also a separate University for Travancore was established. An engineering college and special courses for technical education were started. Education is to a very large extent controlled by private institutions, and 90 percent of the private schools are under the control and management of Christian denominations.

Principal Crops. Rice is the staple food crop. There are 652,615 acres under cultivation, not enough to meet the needs of the state in normal years. The deficiency used to be made up by imports, chiefly from Burma.

Rice is too expensive for the poor, their staple food is tapioca. An area of about 428,000 acres is devoted to tapioca cultivation. Tapioca is easily propagated from stem cuttings, it is hardy and adaptable, yields a large amount of food in a short time.

Coconuts are the most important commercial crop. Travancore is the principal coconut producing center in India with about 580,000 acres under cultivation.

The state is also the most important pepper growing center in India. Some 2,843 acres are devoted to pepper gardens, in addition pepper vines are found near every house. In tea production, the state ranks third in India. The area under tea cultivation in 1939 was 78,638 acres. Coffee plantations are less important, covering about a thousand acres. Travancore produces about 76 percent of the rubber

yield for India. In 1937, 94,816 acres were devoted to rubber trees. The rubber acreage has been increased since. Most of the rubber and tea plantations are owned under long term lease from the state and are managed by British planters.

Sugar cane cultivation covers nearly 13,000 acres. Cardamons are extensively grown in the highlands. Cashew nuts are an important export to the U.S. Other crops are ginger, turmeric, tamarind, nux vomica, areca nut. Food crops include yams, beans, gram, and bananas.

Occupations and Industries. Agriculture is far and away the most important occupation. An important subsidiary occupation is the preparation of coir yarn and matting. Coir is made of the fibrous outer husk of the coconut. The husks are soaked, then dried and beaten to a fluffy mass and finally spun into yarn. The yarn is principally used to make mats, and the door mat of your house probably came from Travancore.

Two cotton mills, one at Alwaye, the other at Quilon, are not sufficient to meet local textile needs. A paper mill at Punalur turns out 50 tons of rough paper a month. A match factory began operations in 1937.

Exports and Imports. The chief items of export are copra (dried coconut meat), coconut oil, coir yarn, fibre and mats, pepper, tea, rubber, coffee, cardamon, ginger, turmeric, tamarind, nux vomica, cashew kernels, lemongrass oil, jaggery, salted fish, areca nut, rosewood, teak wood, ilmenite, mozanite, and zircon. The total value of exports in 1937-38 was Rs. 94,300,000. Of this trade, 33.74 percent was with British India, 32.17 percent with Cochin state, 22.46 with the United Kingdom, 5.23 with the U.S., 6.4 with other countries.

The principal items of import are rice, cotton, piecegoods, chemicals and dyes, stationery, paper, machinery and mill work, drugs

and medicines, hardware and cutlery, cement, manufactures and iron and steel, electrical equipment, petrol, tobacco, snuff, liquor, and unshelled cashew nuts. Imports of rice and paddy (unhusked rice) in 1937-38 amounted to 6,534,956 cwts. valued at Rs. 25,757,077. Of the import trade in 1937-38 about 44.54 percent was with Burma (chiefly rice), 11.01 percent with the United Kingdom, 3.79 percent with Japan, and the remaining 10.49 percent with other countries.

Means of Trade Transport 1937-38

Export		Import	
Sea	24.21 percent	21.75	percent
Backwater	40.15 "	54.14	"
Land	21.85 "	11.61	"
Railway	13.79 "	12.50	"

Minerals Exported 1937-38

	Tons
Monazite	5,048
Zircon	1,922
Ilmenite	240,280
Mica	3

Administration. The Maharaja is the source of all authority, every legislative measure passed by the legislature must have his assent, and he may decree laws independently of the legislature. In 1937-38, the Maharaja appropriated Rs. 1,299,000 for himself. That was by no means all of his income. He has revenue from lands and has the use of such budgetary items as Rs. 500,000 for state charities to be spent on anything he considers charitable.

The executive branch of the administration is headed by the Dewan, who is appointed by the Maharaja with the consent of the British government. In actuality the Dewan is the manager of the state, with the Maharaja dabbling in government business only to the extent deemed necessary by propriety and the demands of the regal

conscience. However, the Dewan must be careful to keep the Maharaja (and in this state, his mother also) in good humor else he may be out of a job. The Dewan has a secretariat modelled after that of the government of India. The Dewan is also head of both chambers of the legislature.

The lower house is called the Sri Mulam Assembly and is composed of 62 elected non-official members and 10 appointed officials. The Sri Chitra State Council, the upper house, has 27 elected non-official members and 10 appointed officials. The legislature has been the government's puppet, although it does provide an opportunity for politicians to let off steam on non-controversial matters. Of late years the legislature has begun to show signs of independent judgment.

The High Court, appointed by the Maharaja, is at the head of the judicial heirarchy. It does not have jurisdiction over European British subjects and any important decisions must be confirmed by the Maharaja.

Goods made in British India or Cochin, or goods on which import duty has been paid in British India or Cochin, are admitted into the state duty free. The state can levy export duty on any commodity and most of the important items of export carry such a levy. The sale of salt, opium, ganja, and arrack (alcoholic liquor made of coconuts) is monopolized and controlled by the state.

A number of industrial projects have been planned and a few are under construction. Most important is the Pallivasal power project to generate hydro-electric power by impounding the waters of the Mudurapuzha River. The completion of this project has been held up by delay in shipment of equipment from England. A ceramic factory is in operation at Kundara and an aluminum smelter at Alwaye may shortly be in production.

The government has recently taken over the principal bus lines of the state.

The Travancore State Forces in 1940 numbered about 2,500 officers and men. They consisted of the Maharaja's bodyguard, three infantry units, an artillery unit of two saluting batteries of four guns each, and a band. The Commandant is a British officer.

Recent Political Developments. During the regency of the Senior Maharani, the state was well administered. The Christians were especially fond of the old lady, who is universally considered to be a woman of high virtues. When the Junior Maharani came to power, and since the appointment of Ramaswami Aiyar, there has been a strong feeling among the Christians that they are being discriminated against. In the general elections of 1936, a political organization called the Joint Political Party comprising Christians, Ezhavas, and Muslims secured a majority among the elected members of the legislature. The increasing number of conversions from Hinduism to Christianity and the political alliance between the Ezhavas and the Christians has caused the Dewan and the Junior Maharani a good deal of concern. One counter measure was the temple entry proclamation of November 1936, whereby all state temples were thrown open to the depressed classes, including the Ezhavas.

The introduction of provincial autonomy in British India created a great political stir in the Indian states and particularly in Travancore. A new organization called the Travancore State Congress was started, with aims similar to those of the India National Congress. The State Congress began an intense campaign for responsible government, i.e. democratic representation. The Dewan was forced by the great popular support of the State Congress to promise reforms. As soon as the war broke out, however, he declared that no scheme of reform

could be considered until after the war.

The Dewan is undoubtedly able as an administrator and capable in general, but there is strong resentment against him in the state because of the suspicion that he is not free from the taint of corruption and because he is supposed to take orders from the Junior Maharani, who is not exactly popular.

The people of Travancore may well be one of the first to curb the autocratic powers of a feudatory ruler. Not because the Maharaja's government has been particularly bad; quite the contrary, it is a paragon of good government as compared with most other states. But the people are more educated and less enslaved than in other states, and are highly aware of the possibility and the advantages of self government.

APPENDIX I

Newspapers and Periodicals in South India and Orissa

Newspaper or periodical	Where published	Language	Daily or weekly or otherwise	Estimated circulation	General remarks
MADRAS					
Deccan Times	Madras	English	Weekly	2,000	Pro-Muslim League
Educational India	Masulipatam (Distt. Kistna)	Do.	Monthly	1,000	Educational
Free Press	Madras	Do.	Daily	6,000	Pro-Congress
Hindu	Do.	Do.	Do.	35,871	Generally supports Congress official policy but not uncritically. Restrained in criticism and well-informed.
Indian Express	Do.	Do.	Do.	15,000	Pro-Congress. Independent.
Indian Medical Journal	Do.	Do.	Monthly	3,000	A medical journal.
Indian Review	Do.	Do.	Do.	5,000	Liberal, orthodox.
Madras Law Journal	Do.	Do.	Do.	2,900	Deals with legal topics.
Mail (formerly the Madras Mail)	Do.	Do.	Daily	17,500	The journal of planters and European business interests in Madras. Takes a lively interest in and a progressive view of Indian problems. Is restrained and reasoned in its criticism. Influential.
My Magazine of India	Do.	Do.	Fortnightly	20,000	Moderate (humorous journal).
Peace Guardian	Do.	Do.	Monthly	5,000	An insurance journal.

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MADRAS (cont.)

Students' Weekly	Saidapet (Chingleput)	English	Weekly	5,000	Educational.
Sunday Times	Madras	Do.	Do.	23,000	Pro-Congress but does not approve of the extreme Left-Wing.
Alma, E.	Do.	Urdu	Daily	700	Pro-Muslim League
Ananda Vikatan	Do.	Tamil	Weekly	35,000	Pro-Congress. Influential.
Andhra Patrika	Do.	Telugu	(Daily (Weekly	4,000) 6,000)	Pro-Congress.
Andhra Prabha	Do.	Do.	Daily	7,000	Pro-Congress.
Antharanga	Udipi (Dist. Kanara)	Kanarese	Weekly	2,000	Pro-Congress.
Bharata Devi	Madras	Tamil	Daily	10,000	Pro-Congress.
Bharata Mani	Do.	Do.	Monthly	2,000	Pro-Congress.
Chandrika	Tellicherry (Malabar Distt.)	Malayalam	Daily	2,600	Pro-Muslim League.
Chandrodayam	Madras	Tamil	Fortnightly	12,000	Generally supports Congress official policy.
Chettinadu	Karaikudi (Ramnad Distt.)	Do.	Weekly	1,400	Pro-Congress.
Chitragupta	Madras	Telugu	Fortnightly	2,000	Nationalist.
Dar-ul-Islam	Do.	Tamil	Weekly	2,000	Pro-Muslim League.
Dinamani	Do.	Do.	Daily	20,000	Pro-Congress. Influential.
Hanuman	Do.	Do.	Weekly	14,000	Pro-Congress.
Hindustan	Do.	Do.	Do.	12,000	Pro-Congress.
Jadid Dilchasp	Do.	Urdu	Do.	1,000	Muslim, vehemently communal.
Kalaimagal	Do.	Tamil	Monthly	1,000	Literary and scientific.
Kanteerava	Mangalore (South Kanara Distt.)	Kanarese	Bi-weekly	2,952	Independent Nationalist.
Kistna Patrika	Masulipatam	Telugu	Weekly	3,000	Pro-Congress. Influential.
Kudi Arasu	Erode	Tamil	Do.	4,000	Organ of the Self-Respect Movement. Anti-Congress. Anti-Brahmin.
Kudinool	Do.	Do.	Monthly	3,000	Devoted to Khadi activities in Tamil Nad.
Kumaran	Karaikudi (Ramnad Distt.)	Do.	Weekly	2,750	Devoted to social reform.

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MADRAS (cont.)

Kumara Vikatan	Big Conjeeveram (Chingleput Distt.)	Tamil	Monthly	8,000	Nationalist.
Lokopakari	Madras	Do.	Weekly	2,000	Pro-Congress.
Mathrubhumi	Calicut (Malabar Distt.)	Malayalam	(Daily (Weekly	6,000) 3,500)	Pro-Congress.
Mirasdar	Mayavaram (Distt. Tanjore)	Tamil	Weekly	1,500	Moderate. Supports the rights of the land-owning class.
Musalman	Madras	Urdu	Daily	1,000	Pro-Muslim League. Communal.
Muslim	Do.	Do.	Weekly	1,000	Pro-Muslim League.
Nagara Dutan (City Herald)	Do.	Tamil	Do.	1,000	Anti-Congress. Anti-Brahmin.
Naradar	Do.	Do.	Do.	8,000	Humorous. Unobjectionable.
Navayuga	Udipi Taluk (South Kanara Distt.)	Kanarese	Do.	3,000	Nationalist.
Podhu Janam	Madras	Tamil	Do.	2,000	Pro-Congress.
Prabhat	Mangalore (South Kanara Distt.)	Kanarese	Do.	2,000	Moderate. Has a daily edition also.
Prachanda Vikatan	Madras	Tamil	Fortnightly	6,000	Nationalist.
Prajamitra	Do.	Telugu	Weekly	5,000	Strives for the welfare of the masses.
Rajabhakti	Mangalore	Kanarese	Do.	2,000	Anti-Congress.
Rashtra Bandhu	Do.	Do.	Do.	3,000	Pro-Congress.
Saiful Islam	Madras	Tamil	Bi-weekly	1,400	Pro-Muslim League. Anti-Congress.
Sakthi	Do.	Do.	Monthly	1,000	Mainly literary.
Swadesamitran	Do.	Do.	(Daily (Weekly	20,000) 12,000)	Congress Right-Wing. Known for its sober and reasoned criticism. Well informed.
Swatantra Bharat	Mangalore	Kanarese	Weekly	2,500	Nationalist.
Tamil Mani	Madras	Tamil	Do.	7,000	Pro-Congress.
Thozhilarasu	Trichinopoly	Do.	Fortnightly	2,500	Labour Organ.
Trilinga	Madras	Telugu	Weekly	2,000	Pro-Congress

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MADRAS (cont.)

Vahini	Madras	Telugu	Weekly	3,000	Nationalist.
Viduthalai	Erode	Tamil	Daily	2,000	Anti-Congress. Anti-Brahmin. Pro-Justice Party.
Zamin Ryot	Nellore	Telugu	Weekly	3,000	Organ of the Nellore District Zamindari-Ryots Association. Anti-landlord.
Desa Seva	Bezwada	English Telugu	Do.	2,000	Moderate.
Mitavadi	Calicut	English Malayalam	Do.	1,500	Pro-Congress
Vijaya	Vizianagram	English Telugu	Do.	1,000	Interested in social and commercial subjects.

ORISSA

New Orissa	Cuttack	English	Daily	1,500	Pro-Government. Only English daily of the Province.
Observer	Do.	Do.	Weekly	500	----
Asha	Cuttack	Oriya	(Daily (Weekly	1,000) 2,000)	Pro-Government.
Deshakatha	Do.	Do.	Daily	1,200	Extremist.
Samaj	Do.	Do.	(Daily (Weekly	9,800) --)	Pro-Congress.

TRAVANCORE STATE

Malabar Advocate	Trivandrum	English	Weekly	1,200	Represents the Syrian-Christian Community. General and political.
Vanchi Rajyam	Kottayam	Malayalam	Do.	2,000	Social and literary.
Deepika	Do.	English-Malayalam	Daily	4,143	Social and political.
Dekshina Bharathi	Eraniel	Anglo-Vernacular	Weekly	6,000	General and political.
Dharma Bhumi	Trivandrum	English-Malayalam	Do.	4,000	General and political.

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TRAVANCORE (cont.)

Kaumudi	Trivandrum	Anglo-Vernacular	Daily	5,000	General and political.
Malayala Rajyam	Quilon	Do.	Do.	6,000	General and political.
Malayali	Trivandrum	Do.	Do.	4,000	Deals in all subjects.
Poura Dhwani	Kottayam	English-Malayalam	Do.	4,493	Social and political.
Powra Prabha	Do.	Do.	Do.	4,240	General and political.
Rasikan	Tribandrum	Do.	Monthly	5,000	Social and political.

MYSORE STATE

Al-Kalam	Bangalore City	Urdu	(Daily (Weekly	2,000) 3,000)	Moderate.
Janmabhumi	Do.	Kannada	Daily	1,800	---
Kannada Jyoti	Do.	Do.	Monthly	2,000	---
Kathangeli	Do.	Do.	Do.	3,000	---
Tai Nadu	Do.	Do.	Daily	3,500	Moderate.
Varittanta Patrika	Mysore City	Do.	Weekly	3,625	Moderate.
Visvakarnataka	Bangalore City	Do.	(Daily (Weekly	2,500) 3,000)	Moderate.

COCHIN STATE

Cochin Argus	Cochin	English	Weekly	1,500	Moderate.
Times of Malabar	Ernakulam	Do.	Do.	600	Moderate.
Deepom	Do.	Anglo-Vernacular	Daily	6,840	Moderate.
Gomathi	Trichur	Do.	Do.	10,300	Moderate.
Lokaprakasam	Do.	Anglo-Malayalam	Weekly	1,500	Moderate.
Malabar Mail	Ernakulam	Anglo-Vernacular	Do.	10,000	Moderate.
Mythri	Do.	Do.	Monthly	1,000	Moderate. Social and literary.
Sathia Deepom	Do.	Do.	Weekly	2,500	Moderate.

BANGALORE (CIVIL AND MILITARY STATION

Daily Post	Bangalore	English	Daily	2,700	Moderate. Has some influence with Anglo-Indian community.
Federal India and Indian States	Do.	Do.	Weekly	2,000	Moderate. Supports the cause of Indian States. Anti-Congress.
Mysindia	Do.	Do.	Do.	5,000	Moderate.
Quam*	Do.	Urdu	Daily	5,000	Has some influence with Muslim public. Pro-Muslim League. Moderate.

*Has a weekly edition also.

Data from Guide issued by Gov't. of India, Bureau of Public Information, New Delhi, January 1941.

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